

Mid-term Implementation Review of the Flyway Action Plan for the Conservation of the Balkan and Central Asian Populations of the Egyptian Vulture *Neophron percnopterus*

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Executive Summary

The Flyway Action Plan for the Conservation of the Balkan and Central Asian Populations of the Egyptian Vulture *Neophron percnopterus* (EVFAP) was published in 2016 and began implementation the following year, after being endorsed at COP12 by CMS Parties as Annex 4 of the Vulture MsAP. Now at the midway point of the 10-year plan, we have reviewed implementation of the Framework for Action as envisaged in the plan itself.

The review has been carried out using the methodology and scoring as set out by Birdlife International in 2011. This questionnaire (available in English and Russian) was sent to a focal contact for each of the 33 countries in the original EVFAP. Information on any updates to both conservation and legal status were also collated. Countries scored each of the 59 actions for their Implementation (IS; scored 0-4) and Priority (PS; scored 1-4) which combined to produce an Action Priority Index. The National Implementation Score (NIS) was also calculated for each country. Responses were received from 29 countries in total and the NIS ranged from 1.00 to 2.70 with an average of 1.56 for the whole flyway. Countries which were part of the Egyptian Vulture New LIFE project (14 along the flyway) had an average NIS of 1.83, showing the value of large-scale projects such as this in delivering conservation measures.

Following a workshop in November 2022 and the feedback received in the questionnaires some regions were invited to score actions which hadn't previously been considered such as the impact of energy infrastructure in Central Asia and Caucasus. At this workshop it was also discussed where the priority score for an individual country or region should be significantly different than in the EVFAP when producing the API as threats had previously been assigned at a flyway level.

Excellent progress has been made but there is still much to be done to complete the overall goal of the EVFAP to improve the conservation status of the Egyptian Vulture in the entire FAP range. Notably the highest scoring actions under the API are associated with improved detection, legislation and enforcement surrounding poisoning and the retrofitting and replacement of dangerous energy infrastructure. Working with stakeholders, whether local communities, governments or developers, also further efforts in the remaining five years of the EVFAP. We recommend sharing of best practice and methods continues to be encouraged to ensure the ultimate goal of halting the current population declines.

Introduction

In 2016 the Flyway Action Plan for the Egyptian Vulture (Nikolov et al. 2016) (hereafter EVFAP) was integrated into the Multi-species Action Plan for African-Eurasian Vultures (Botha et al. 2017) and formally adopted by CMS Parties at the Conference of the Parties (COP12) in Manilla in 2017.

We have now reached the mid-point of this 10-year plan, and as outlined in the EVFAP it is time to review the implementation so far. We have approached key contacts for the species in each of the 33 range states to input into a questionnaire where each of the 59 actions were scored for implementation and priority. Information on any updates to both conservation and legal status were also collated.

Objectives

The purpose of this review is to assess the implementation of the EVFAP since its adoption five years ago and provide an updated framework around which work can be based for the next five years. Through the production of the Action Priority Index, member states are provided with an indication where conservation efforts should be focussed.

We also consider outcome indicators such as population size, distribution and trends, evaluate against the population recovery targets set out in EVFAP and any overall change in the species conservation status (Barov & Derhé 2010).

Methodology

We have used the method set out by BirdLife International (Gallo-Orsi 2001) to review action plan implementation. Using an online questionnaire, respondents (see Annex 1) were asked to score each action from the EVFAP framework for action (see Annex 2 for complete list of Actions) for Priority and Implementation. Information was also requested for any change in the legislation or status in each country. A follow up online workshop, hosted by RSPB, BSPB and CMS Raptors MOU and involving representatives from all countries, took place on 10 November 2022 to discuss and agree the scoring carried out. The aim of this workshop was to ensure comparability across the range as well highlight any omissions and key areas of work for the next 5 years.

For most of the Actions this review has used the original priority score from the EVFAP to inform the Action Priority Index (API), but during the workshop priority scores were re-discussed and in some individual countries and regions these were re-evaluated to represent better the current situation (see below for further details).

Priority category	Priority score (PS)	Priority scale of actions (as per the EVFAP)
Essential/ Critical	4	Action needed to prevent a large decline in the population which could lead to the species or sub-species extinction
High	3	Action needed to prevent a decline of $\geq 20\%$ of the population in <20 years
Medium	2	Action needed to prevent a decline of <20% of the population in <20 years
Low	1	Action needed to prevent a local population decline or which is likely to have only a small impact on the population across the range

Implementation	Implementation score (IS)
Action fully (100%) implemented	4
Significant results achieved (51-99%)	3
Some work done (11-50%)	2
Little or no work done (0-10%)	1
Not needed/not recommended for the EVFAP Framework of Actions (meant the Action wasn't considered further for the purpose of this analysis)	0

These scores were then combined to give an Action Priority Index (API) for each Action in each country:

$$\text{Action Priority Index [API]} = \text{Priority Score [PS]} \times ((4 - \text{Implementation Score [IS]}) \div 3)$$

An API of 4 means the action should be high priority to advance in the next 5 years.

PS\IS	0	1	2	3	4
4	n/a	4	2.67	1.33	0
3	n/a	3	2	1	0
2	n/a	2	1.33	0.67	0
1	n/a	1	0.67	0.33	0

Changes to Actions relevant to each region

At the November 2022 workshop, it emerged that based on an improved understanding of the situation, a number of actions should be implemented also in additional countries / regions within the geographical scope of the EVFAP. Therefore, the following regions and actions were additionally scored and are included in the National Implementation Score (NIS) and country information pages in Annex 2, where completed:

Region	Action
Central Asia and Caucasus	2.2.1, 2.2.2, 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.2.1, 3.2.2, 3.3.1, 3.3.2, 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.5
Africa	2.1.1, 2.1.2
Middle East	1.2.1, 1.2.2, 1.2.3

Changes to the priority scores used to calculate the API

For most of the Actions this review has used the original priority score from the EVFAP to inform the API, but during the workshop priority scores were discussed and in some individual countries and regions these are significantly different from the original scores. Below is a summary where changes have been made. Full details of the reason for these changes can be found in the minutes of the 10 November workshop.

Action	Country/region	Change
1.1.1, 1.1.2, 1.1.3, 1.1.4 1.3.1, 1.3.2, 1.3.3, 1.3.4	Central Asia and Caucasus	Use PS from review scoring, generally lower than EVFAP
2.1.1, 2.1.3 2.2.1, 2.2.2 2.3.1, 2.3.2, 2.3.3, 2.3.4	Middle East	Use PS score 3 (high) based on workshop discussion, rather than 2 (medium) from EVFAP
3.1.1, 3.1.2, 3.1.3, 3.1.4 3.2.1, 3.2.2 3.3.1, 3.3.2	Niger	Use PS score 1 (low) rather than 3 (high) from EVFAP
3.2.2	Iraq	Use PS score 2 (medium) rather than 4 (essential)
4.1.1 – 4.1.10 4.2.1 – 4.2.7	Central Asia and Caucasus	Use PS score 3 (high) rather than 1 (low)

Results

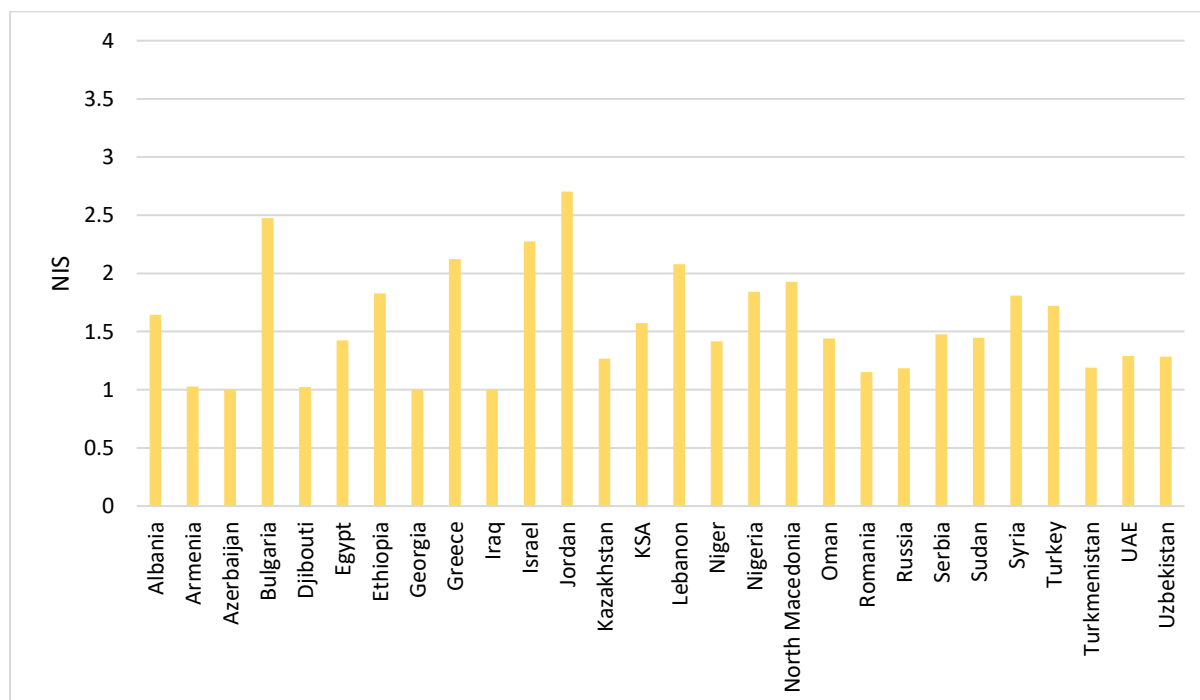
Assessment of implementation

An additional analysis was carried out to find the National Implementation Score (NIS) for each country which combines the urgency of an action with its implementation level.

(NIS) was calculated as:

$$NIS = \sum(PS \times IS) \div \sum PS$$

The range of the NIS is the same as for the IS with 1 representing little or no implementation or 4 representing full implementation. All lines with IS of 0 (and considered not relevant in that member state) were excluded from this exercise.



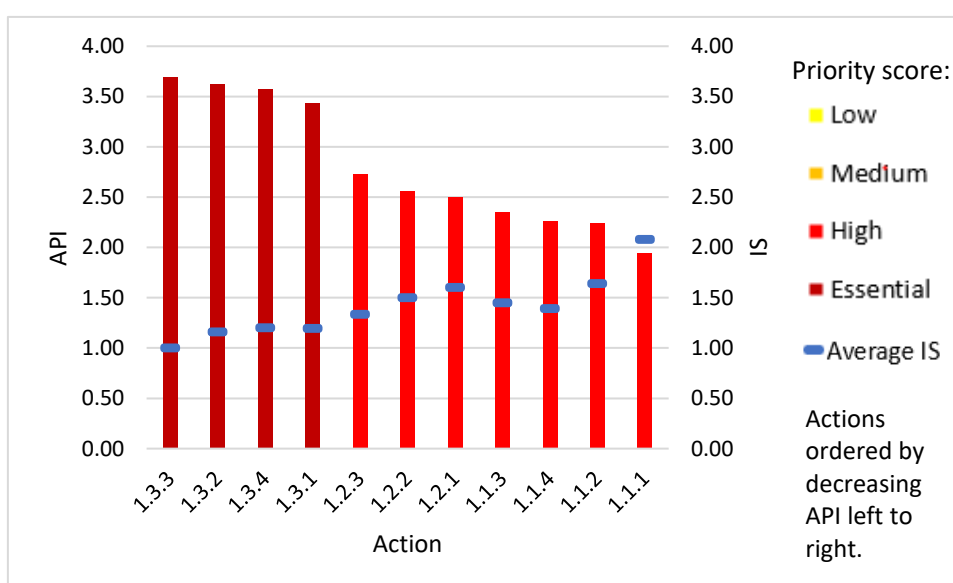
Implementation of the EVFAP has varied along the flyway significantly and has been primarily driven by the Egyptian Vulture New LIFE project (LIFE16 NAT/BG/000874). This project ran in the period 2017-2022 in 14 countries on the flyway and the average NIS for these countries was 1.83 compared with 1.29 for non-project countries. The average for the whole flyway is 1.56.

Expected Result 1 – Effective surveillance, prevention, investigation and enforcement of anti-poison work carried out across all range states

The objective is to significantly reduce mortality due to poisoning through improved detection and understanding of poisoning occurrences, introduce preventative anti-poison measures and increase law enforcement. All actions are either Essential or High priority with a range of implementation along the flyway. Additional analysis since the publication of EVFAP has also highlighted the high priority of the threat of poisoning along the flyway (Oppel et al 2021). The actions relating to legal status and law enforcement of anti-poison work (Actions 1.3.1-1.3.4) are all Essential actions and, as the process of changing legal status and enforcement can be slow, this may take the full term of EVFAP, so they remain the highest priority (API) for the remaining five years. This may be why the current implementation scores for these Essential actions are relatively low, compared with other actions under this Expected Result (see figure below).

While progress has been made in many countries, increasing the capacity of relevant stakeholders for monitoring illegal poisoning was highlighted across the range as requiring more resourcing to ensure delivery of these important actions. In the Balkans the Poisoning Incidents Database has been expanded to more countries and motives for hunting in the region have been reviewed (Pantović et al. 2022).

The impact of Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) on vulture populations in south Asia has been catastrophic (Green et al 2004) and their use and subsequent impact on Egyptian Vultures on this flyway remains largely unknown with little implementation of Action 1.1.4.

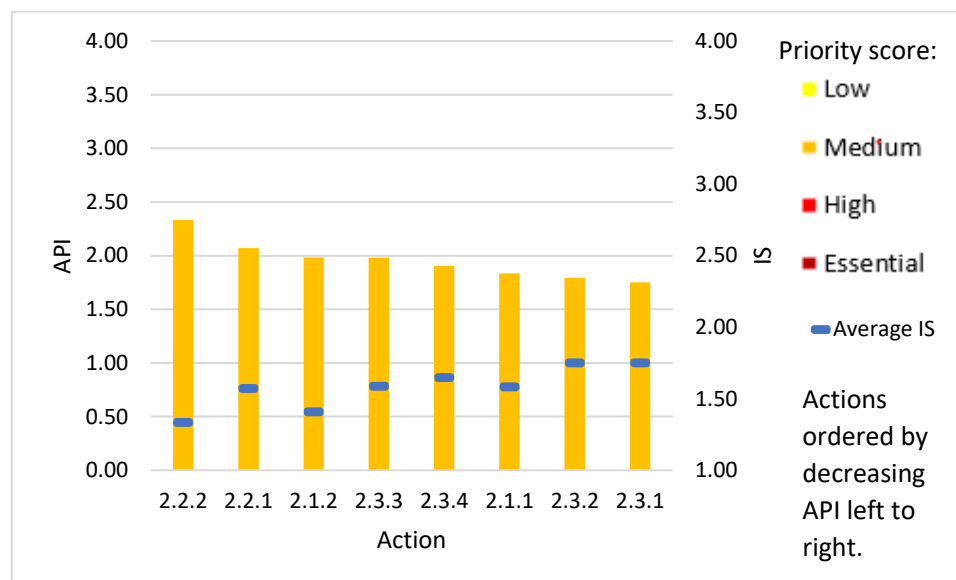


Expected Result 2 – Improved legal protection, prevention, control and judicial response to illegal killing ensured in all range states.

The objective to significantly reduce mortality due to illegal killing of birds (IKB) through detection, prevention and improved judicial response is important not just for Egyptian Vulture but other migratory soaring birds.

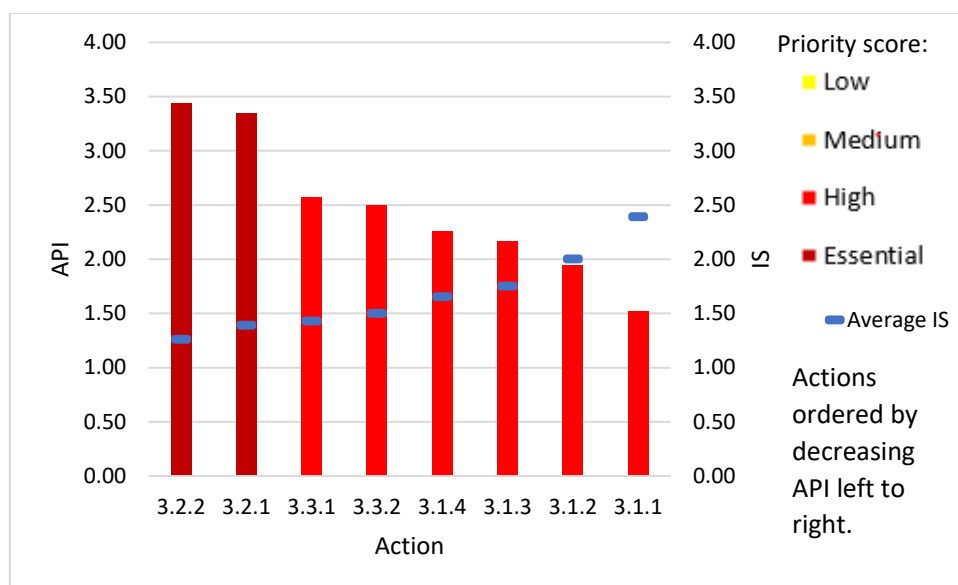
Although not explicitly mentioned in the EVFAP Framework for Action the illegal killing and trade in vulture parts for belief-based use is known to affect Egyptian Vultures (Kret et al. 2018) with body parts recorded at markets in West Africa so should be considered under this action also.

As the actions under this objective were considered medium priority in the EVFAP the API is therefore much lower but illegal killing is considered the priority threat in much of the Middle East and parts of Africa (Oppel et al. 2021) and will inform the next version of the plan. We expect much progress in the implementation of Expected Result 2 as BirdLife, CMS and IUCN initiated a process for development of IKB regional roadmap for the Middle East, as well as Action Plan to conserve West African Vultures.



Expected Result 3 – Effective planning, mitigation and retrofitting measures implemented on energy infrastructure in sensitive areas through implementation of CMS Resolution by all range states.

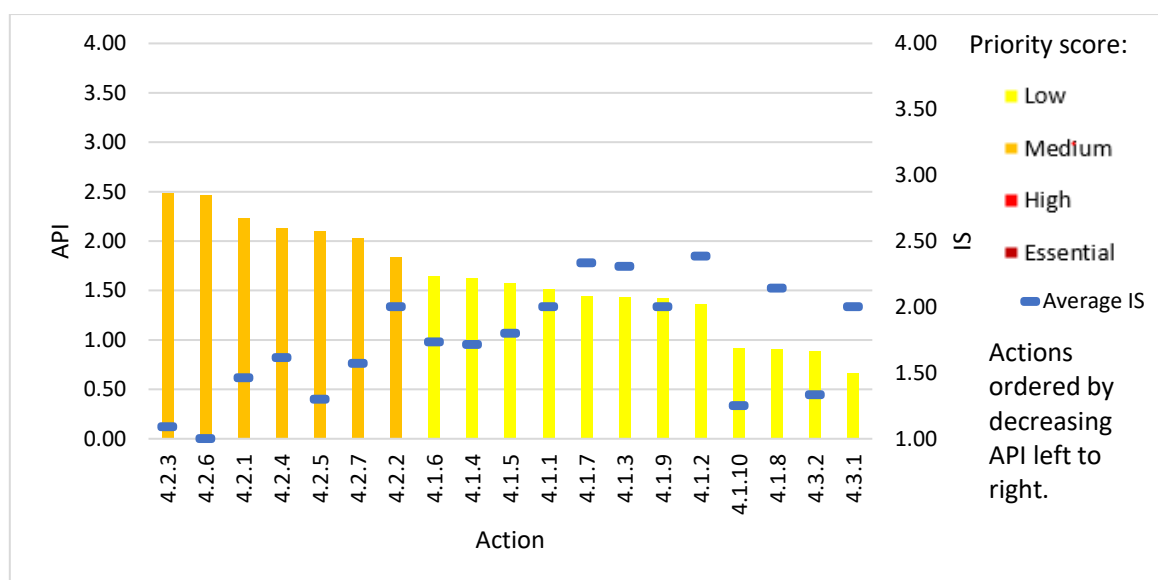
The objective is to significantly reduce the risks of electrocution and collision with energy infrastructure. The retrofitting of energy infrastructure is costly and requires significant financial investment so correctly targeting measures based on high quality survey information (which has been well implemented across the flyway) is vital going forward. Electrocution was considered the priority threat in Turkey, Jordan, Saudi Arabia, Egypt and Ethiopia and a significant threat in the Balkans in the analysis carried out by Oppel et al. (2021). Extending the surveys and targeting of this work into Central Asia and Caucasus has also been recommended, given its success in the Balkans, Middle East and Africa. Working with developers and governments to ensure safe and strategic siting of windfarms, powerlines and other infrastructure associated with power generation remains important (Gauld et al. 2022). The area covered by the Egyptian Vulture flyway is extensive and there are many dangerous electricity poles therefore this expensive work will progress slowly without substantial investment. It is also important to highlight that prevention is also key going forward and bird-safe design should be used for all new infrastructure. This is much more cost effective and should be a commitment in range states.



Expected Result 4 – Effective conservation programmes are in place in all range states

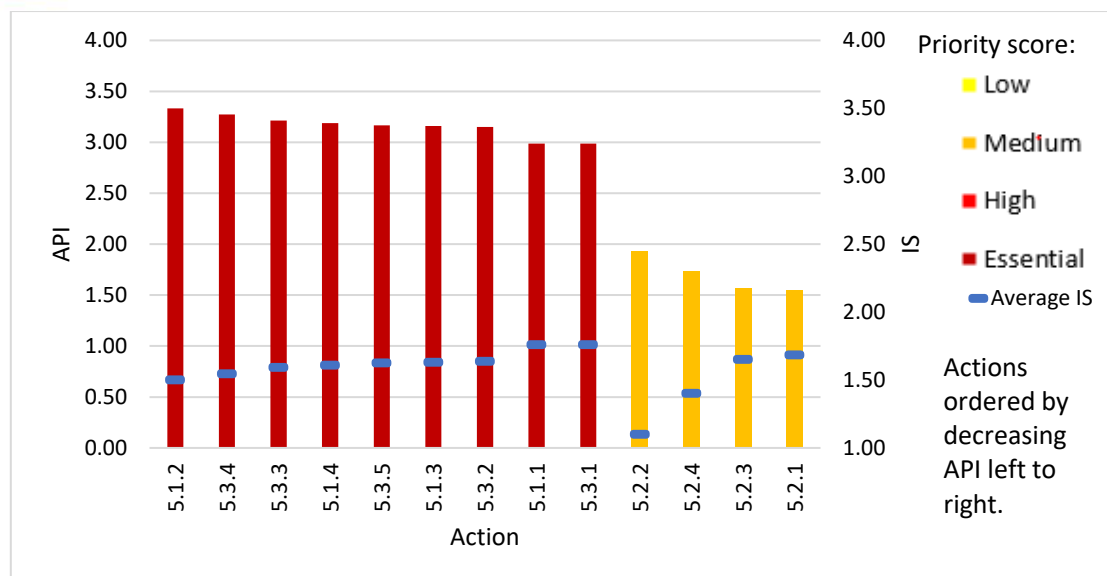
Enhancing the size and productivity of breeding populations is a key action and the monitoring of breeding performance will also provide an indicator of the success of other objectives along the flyway. The long-term reinforcement strategy for Bulgaria and Greece has been developed to complement other conservation activities in the region (Arkumarv et al. 2022).

Actions relating to securing breeding sites and high-quality foraging habitats in home ranges in the Balkans, Central Asia and Caucasus remain the highest priority for the remaining five years.



Expected Result 5 – Awareness about the value of vultures and in relation to the most important threats is raised among the key stakeholder groups

The actions associated with increasing awareness against poisoning and dangerous energy infrastructure, although considered Essential have had limited implementation in the last 5 years. These are long term, and likely ongoing, activities which will ensure the value of vultures and their threats are understood and will need to be prioritised in the remaining 5 years of the EVFAP.



Species status along the flyway

Breeding

The breeding population in the Balkans is showing early signs of stabilisation, following the successful implementation of two LIFE projects over the last 10 years (LIFE10 NAT/BG/000152 and LIFE16 NAT/BG/000874) (Oppel *et al.* 2023), but this follows a long term and serious decline. In Romania and Serbia the species has been confirmed as locally extinct.

Elsewhere further field efforts have revised some estimates for breeding. In Azerbaijan the current estimate is 59 pairs. In Georgia a previously unknown reference of 105-110 breeding pairs has updated the information (Abuladze 2013). In Saudi Arabia at least one pair has been confirmed (2020), but an estimation of population size is yet not available. In Israel an improvement in breeding surveys re-evaluated the breeding population to 60-70 pairs. In Uzbekistan surveys have suggested that the national breeding population in the nSAP is an underestimate and the figure is likely more than 200 pairs. Further surveys in Oman have estimated over 225 territories in one study area (Angelov *et al.* 2020).

The interaction between the sedentary Egyptian Vulture populations and the migratory birds in Africa was raised in the review workshop. Breeding studied in Niger in the last 5 years, which confirmed 11 active territories in the Koutous Massif (Pouchier *et al.* 2023). This relationship could provide areas of future research in the region.

Migratory

There were no reported changes in number of migratory birds at previously known sites. The Galala Bird Observatory, Egypt was established in 2022, counting more than 1200 Egyptian Vultures in the spring season (Noby *et al.* 2022) has become an important monitoring site for the flyway going forward. Monitoring of the autumn migration in southern Turkey is also important to continue if sufficient investment and effort could be secured for the foreseeable future, but the consequences of the disastrous 2023 earthquake may render monitoring difficult. Spring migrants were also noted regularly in Romania where 1-2 birds are seen regularly.

Wintering

Satellite tagged individuals and field surveys has provided improved information on the wintering status and distribution as well as on the numbers along the flyway. In Niger, 35 individuals were identified in Koutous Massif at a small congregation site (Pouchier *et al.* 2023). In addition, 10 tagged

individuals have been recorded in Niger in the last decade. Field surveys in Ethiopia in 2019, 2020 and 2022 provide an estimate of at least 1500 individuals wintering, mostly in Afar region (Dobrev et al. 2023).

New estimates are available for Saudi Arabia, with a regular wintering population estimated in the 100s with counts of 171-208 (2019-21) (Shobrak et al. 2020). The trend for the last decade is unknown but likely declining.

In Greece there appears to be a slightly increasing trend with 2-3 individuals overwintering in Crete.

Key sites

New important areas and key sites (and amendments to numbers utilising those areas) have been suggested in 11 countries along the flyway. Many of these sites have been highlighted by satellite telemetry as well as field surveys. Those that meet the KBA criteria should be proposed in the next stage of implementation.

Country	Area or site name	Season	Area or site size (km ²)	Location coordinates	Further information
Albania	Permet-Carshove	B	c500 km ²		
Albania	Sarande	B	208km ²		
Bulgaria	Karnobat Municipality	B	km ²	42°37'29.39"N 26°58'53.81"E	1-3 individuals
Bulgaria	Simeonovgrad Municipality	B	km ²	42°2'42.75"N 25°49'20.78"E	1-3 individuals
Bulgaria	Harmanli Municipality	B		41°51'26.70"N 25°47'39.07"E	2-5 individuals annually
Egypt	Galala plateau	M	4km ²	29°26'44.88"N 32°26'34.80"E	1500 individuals (2022)
Egypt	Shalatin	A	100km ²	23° 6' 18" N 35° 33' 28.08" E	10 (2013)
Ethiopia	Afar Region	W	40,000km ²	11°49'0" N 41°25'0" E	Surveys in 2019, 2020 and 2022 suggest increase to c1500 birds utilising area. Mille-Sardo Wildlife Reserve has now been designated as a KBA
Greece	Konitsa, Epirus	B	300km ²	40° 2' 11.45" N 20° 43' 4.47" E	3 individuals (2020-22)
Greece	Crete	W	8450km ²	34°57'8.41"N 25° 5'53.58"E	1-3 individuals (2019-2022)
Greece	Thrace	B	594km ²	41° 07' 19.82"N 26° 13' 42.89"E	4-5 pairs (2021-22)
Greece	SPA Meteora, Chassia, Antichasia	B	720km ²	39°44'28.60" N 21°45'33.13" E	1 individual – amendment from EVFAP
Israel	Central Arava	B, M,	c1500km ²	30° 35' 30" N 35° 12' 30" E	3-10 pairs
Israel	Carmel Mountains	B			1-3 pairs new estimate

Israel	Judean Desert	B			8-12 pairs new estimate
Israel	Negev Mountains	B			20-35 pairs new estimate
Israel	Eilat Mountains	B			3-5 pairs
Kazakhstan	Ustyurt Plateau	B	3500km ²		30-40 pairs
Kazakhstan	Karatau Mountains	B, M			120-150 breeding pairs, 150-200 individual migrants
Lebanon	Hammana Area	M		33°48'39.76"N 35°44'47.73"E	8 individuals (2021)
Niger	Koutous Massif	B, M, W			11-20 pairs (2020)
Saudi Arabia	Wadi Qanuna, Makkah Province	W	>600km ²	19°12'37.1"N 41°19'07.5"E	170-210 individuals annually (2019-21). Good quality data. See Shobrak <i>et al</i> 2020
Syria	Slenfeh	M	c60-80km ²	35°36'20"N 36°12'30"E	11 individuals (2022)
Turkey	Mersin	B			
Uzbekistan	Zerafshan	B	3700km ²	39°14'42.68"N 67°7'44.44"E	200 individuals using dump site in breeding season
Uzbekistan	Gissar Ridge	B	19,000km ²	38°30'27.48"N 67°9'19.69"E	130-150 individuals using a dump site in breeding season

Conservation and Legal Status

Since the publication of EVFAP the status of National Species Action Plans (NSAP), the legal protection of the species and relevant policies has evolved. Details of these changes are included below.

Countries which have had change in the National Species Action Plan status in the last five years:

Bulgaria - NSAP was endorsed January 2023, updated for the next 10 years.

Greece - NSAP was endorsed 25 October 2017

Turkmenistan – NSAP was developed in 2020 for the period 2021 – 2030 (Yankov & Rustamov 2020) but is yet to be formally adopted.

NSAPs are also under development in Iraq and Iran.

Countries where there has been a change in the legal protection afforded to Egyptian Vultures:

Jordan - Protected under the new Decree 2/z-2021 on regulating bird hunting and trade

Kazakhstan - Change in amount of compensation for the damage of wildlife: Order of Minister of Agriculture of the Republic of Kazakhstan N 18-03/158 "The amount of compensation for damage caused by the violation of the legislation of the Republic of Kazakhstan in the field of protection, reproduction and use of the animal world" (updated 11/05/2017)

Niger - Adoption of a law in 2019 to punish offences relating to the trade in endangered species of wild fauna and flora in Niger as part of the CITES.

Nigeria - Endangered Species Act 2016.

Saudi Arabia - Legal protection from taking and killing came into force in 2021 (Alatawi 2022). Responsible national authority: National Centre for Wildlife (NCW)

Syria - An update to the Hunting Law was drafted and reviewed to get the conservation and protection of the endangered species including the Egyptian Vulture. This was approved by the Higher Hunting Council and waiting for the final administrative approval and issuance of the law and then the bylaws.

Countries where there has been changes in relevant national policies, legislation and sectoral programmes:

Albania

- The Anti-poisoning roadmap 2022-2030 has been drafted by the National Anti-poisoning Working Group, sent for approval to the Ministry of Tourism and Environment. The latter is circulating the roadmap to relevant stakeholders including other governmental institutions, academic and research institutions, non-governmental organisations etc.
- Relevant anti-poisoning legislation was amended in 2019 through Law No. 46/2019.
- The current law on fauna protection and conservation now specifies that agricultural chemicals, veterinary drugs are potential threats to wild fauna if not managed in accordance with the current legislation. In addition, the law specifically prohibits the use of poison baits for the extermination of species of wild fauna.

Bulgaria

- The agri-environmental measure targeted towards the protection of habitats of the Egyptian vulture ensured for the new planning period 2023-2027 of the National Strategic Plan of Development of Agriculture and Rural Areas
- National Anti-poison Action Plan was adopted (2023-2032)

Ethiopia

- An MoU between conservation organisations and electrical supply companies was signed in 2020, ensuring good will for collaboration towards bird-safe power grid in the country.

Greece

- Ministerial Decision against the use of poison baits endorsed on 03/09/2018.
- Joint Ministerial Decision against wildlife poisoning endorsed on 22/08/2022

Nigeria

- National Strategy to Combat Wildlife and Forest Crime 2022-2026

Conservation efforts

Focus of conservation efforts, both within and outside of large-scale projects, has varied along the flyway with vital monitoring of breeding, migration and wintering populations. In the Balkans there has been much work on anti-poison work including the support of specialist dog units. In the Middle East and Africa there has been focus on the mitigation of IKB and energy infrastructure as well as efforts to reach a ban on using harmful NSAIDs over the coming period. In Central Asia and Caucasus important monitoring has been instigated as well as the satellite tagging of individuals, as part of the

Central Asian Vultures project mostly, but there have not been large projects around which to focus the work.

Individual countries have also carried out research and conservation programmes and these are referenced in Annex 1 and 2.

Financial input

Respondents were asked to provide an estimation of the amount of money spent on each expected result in the last five years using the following scale:

€	=	<10,000 €
€€	=	10,000 – 50,000 €
€€€	=	50,000 – 100,000 €
€€€€	=	>100,000 €

Country	Expected result 1 Anti-poisoning	Expected result 2 Legal protection	Expected result 3 Energy infrastructure	Expected result 4 Conservation actions	Expected result 5 Awareness raising
Albania	€€€	€	€€€	€€	€€€
Armenia	?	?	?	?	?
Azerbaijan	€€€	€€	€€€	€€€	€€€
Bulgaria	€€€	€	€€	€€€	€€€
Djibouti	?	?	?	n/a	?
Egypt	€€	€€€	€€€€	n/a	€€€
Eritrea	?	?	?	n/a	?
Ethiopia	€€€	€	€€€	n/a	€€€
Georgia	€€	€€	€€€	€€€	€€€
Greece	€€€€	€€	€€€	€€€€	€€€
Iraq		?	?	n/a	?
Israel	€€€€	€€	€€€€	n/a	€
Jordan	€€€€	€€€€	€€€	n/a	€€€
Kazakhstan	€€	€€	€€€€	€€€	€€€
Lebanon	€	€€	?	n/a	€€
Niger	?	€€	€	n/a	€€
Nigeria	€€€	€€	€	n/a	€€€
North Macedonia	?	?	?	?	?
Oman	€	€	€	€€	€
Romania	€€	€€	€€	€€	€€
Russia	?	?	n/a	?	?
Saudi Arabia	€	€€€€	€€€	n/a	€€
Serbia	€€	€€	€	€	€€
Sudan	€€€	n/a	€€	€€	?
Syria	€	€	€	n/a	€€
Turkey	€€€€	€€€€	€€€	€€€€	€€€€
Turkmenistan	?	?	?	?	?
UAE	?	?	?	n/a	?
Uzbekistan	€€	€€	€€€€	€€€€	€€€€

Minimum amount spent per expected result	€775,000	€480,000	€755,000	€445,000	€770,000
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If these amount are considered as the minimum values of these categories (except € which is considered as €5000) then at least €3.2million has been spent in achieving the actions of the EVFAP in the first five years of implementation.

Major sources of funding in delivering the EVFAP have included the EU's LIFE programme, Global Environment Facility (GEF) and MAVA Foundation. [Egyptian Vulture New LIFE Project](#) (LIFE16 NAT/BG/000874; 2016-2022) has delivered conservation actions in 14 countries from Balkans, Middle East and Central Africa and has been the primary delivery mechanism for EVFAP. [BalkanDetox LIFE](#) (LIFE19 GIE/NL/001016), has helped deliver policy and capacity building actions in in 6 countries in the Balkans. Other LIFE projects include: [LIFE IP 4NATURA](#) (LIFE16/IPE/GR002); [LIFE RE-Vultures](#) (LIFE14 NAT/NL/000901 – A2). The [MSB GEF project](#) (2018-2022) has delivered against many of the EVFAP actions in 6 countries in the Middle East and Africa, particularly focussing on energy infrastructure and hunting. The [MAVA Foundation](#) has also given grants to several countries around the Mediterranean Basin to address illegal killing, energy infrastructure and poisoning. Core funds from NGOs also continue to be a significant source of funding the delivery of the EVFAP and wider Vulture MsAP. Yet, little or no information was provided about the governmental financial support in EVFAP implementation.

Conclusions and Recommendations

The long-term goal of the EVFAP is to improve the conservation status of the Egyptian Vulture across the FAP range and its eventual down-listing from Endangered to Vulnerable (Nikolov *et al* 2016). The EVFAP has Monitoring Indicators for each objective and during the first 5 years much progress has been made but the species remains Endangered across its global range, although has been down listed in Europe from Endangered to Vulnerable (BirdLife 2021). The Balkan population is showing signs of stabilisation with a stable population growth rate between 2018 and 2022 (Dobrev *et al.* 2023, Oppel *et al.* 2023), and adult survival probability >0.9 since 2014. However, this recent stabilisation is a consequence of intensive conservation management and reinforcement, and the population is not yet able to recover from the catastrophic decline over 30 years between 1980 and 2013 (Velveski *et al.* 2015) without continuous conservation efforts. Stable population numbers have also been documented at migration bottleneck sites in Turkey and Egypt, and in the wintering congregations in Saudi Arabia, Ethiopia and Niger (Dobrev *et al.* 2023). There is also little or no scientifically evidenced information on the population trends in Central Asia and Caucasus (but see Kiryakin *et al.* 2023 for Kazakhstan) or for other breeding areas on the flyway (but see Pourchier *et al.* 2023 for Niger).

This review has not highlighted any additional or new threats to the Egyptian Vulture but as informed by the questionnaires, workshop and the work of Oppel *et al.* (2021) there is a much clearer picture of threats regionally. In particular NSAID use and licencing in the Middle East, the magnitude of belief-based use in west Africa and the threat of electrocution of Turkey and Ethiopia. This further understanding has enabled adaptation of the priority scores for specific regions/countries and is included in the API figures presented here.

This method (Gallo-Orsi 2001) did not take the original timescale from the EVFAP into account and neither did it affect the API going forward. In the country accounts the actions which have gone beyond their time scale are highlighted for information. However, there are High and Essential actions which should have been completed in the first 3 or 5 years of the EVFAP which have not made

significant progress. These are primarily focussed on the detection and understanding of poisoning, IKB and electrocution. The implications for the timescale of these actions being delayed should be considered as may also result in the delay of appropriate threat mitigation, and thus jeopardizing the achievement of EVFAP objective and expected results.

Specifically, the following areas should be the focus of work for the remaining 5 years of EVFAP:

- There is an urgent need for **more involvement of government bodies**.
- Most of implementation of the EVFAP as described here has been carried out by NGOs and has also been reported by NGOs. Many of the actions and the implementation of the EVFAP are the responsibilities of governments. The active involvement of government bodies is critical for the next 5 years of implementation. Many of the actions with the highest API relate to change in national government policy and laws, whether it is improved legal protection for the species, banning the use of poison baits in the nature and dangerous NSAIDs or introducing bird-safe energy infrastructure as standard. These require engagement from relevant government departments and authorities to ensure actions are implemented (especially valid for CMS and Raptors MoU signatures).
- **Ongoing monitoring** is vital in breeding areas and at migration bottlenecks.
- There are also **actions which have a high implementation score which need to be maintained** (despite their high IS resulting in a low API) such as anti-poison patrols in the Balkans. The current method does not account for this, but we recommend that such ongoing actions are continued.
- We recommend that **awareness raising is given equal standing compared to on the ground conservation actions and supported financially** to ensure threats are given due consideration and their awareness continues to be raised.

Ensuring threats are understood and the implication of non-engagement in combatting them is vital to improving the conservation status along the flyway. These actions should be considered a fundamental part of relevant Expected Results not as separate stand-alone actions.

- All of the outstanding actions will require financial investment (especially for actions such as making energy infrastructure bird safe) so **collaborative working to attract funding should be encouraged both internationally and within range states**.

There has been significant investment in Egyptian Vulture conservation (both directly targeted and indirectly) in many of the EVFAP range states and sharing best practice from these large-scale projects should be encouraged as well as provide a blueprint for further flyway conservation efforts.

- We do however suggest countries which have not responded to this consultation be reconsidered in the scope of the plan due to lack of any reported implementation. Currently these are Central African Republic, Chad, Eritrea, Iran and Yemen. Some of these countries do hold significant populations (e.g. wintering birds in Chad and Yemen).
- The **threat of the illegal killing of birds is often very specific and localised** (e.g. shooting in Lebanon; belief based use in Nigeria and Niger) and therefore the priority given to these actions should be adaptive.
- Evidence about breeding population in Romania and Serbia was not found (only occasional observations were recorded), thus no specific EVFAP activities are recommended for these two countries in the next 5 years.
- The **API figures produced here are important as should drive work going forward**, including finding resource to ensure vital conservation actions are implemented and completed in the remaining 5 years of this flyway action plan, as well as towards the delivery of the CMS Vulture MsAP.

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Abbreviations

ACBK	Association for the Conservation of Biodiversity of Kazakhstan (BirdLife Kazakhstan)
AOS	Azerbaijan Ornithological Society
API	Action Priority Index
APLORI	A. P. Leventis Ornithological Research Institute
BSPB	Bulgarian Society for the Protection of Birds (BirdLife Bulgaria)
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMS	Convention on the Conservation of Migratory Species of Wild Animals
DD	Doğa Dernegi (BirdLife Turkey)
EIA	Environmental Impact Assessment
EU	European Union
EVFAP	Flyway Action Plan for the Conservation of the Balkan and Central Asian Populations of the Egyptian Vulture (<i>Neophron percnopterus</i>)
EWNHS	Ethiopian Wildlife and Natural History Society (BirdLife Ethiopia)
HOS	Hellenic Ornithological Society (BirdLife Greece)
IBA	Important Bird Area
IKB	Illegal Killing of Birds
IUCN	International Union for Conservation of Nature
IS	Implementation Score
KBA	Key Biodiversity Area
MEA	Multilateral Environment Agency
MoU	Memorandum of Understanding
MSB	Migratory Soaring Birds
NGO	Non-governmental organisation
NIS	National Implementation Score
NSAID	Non-steroidal anti-inflammatory drug
NSAP	National Species Action Plan
PS	Priority Score
PPNEA	Association for Protection and Preservation of Natural Environment in Albania
PVA	Population Viability Analysis
RSCN	Royal Society for the Conservation of Nature (BirdLife Jordan)
RSPB	Royal Society for the Protection of Birds (BirdLife UK)
SAP	Species Action Plan
SEA	Strategic Environmental Assessment
SCF	Sahara Conservation Fund
SPA	Special Protection Area
SSCW	Sudanese Wildlife Society
UAE	United Arab Emirates
UzSPB	Uzbekistan Society for the Protection of Birds (BirdLife Uzbekistan)
VCF	Vulture Conservation Foundation
Vulture	Multi-species Action Plan to Conserve African-Eurasian Vultures
MsAP	

Annex 1 – Framework of Actions

Taken from pg 43 from the EVFAP

Action	Region	Priority	Timescale
1.1.1. Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use	All	High	Medium
1.1.2. Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	All	High	Medium
1.1.3. Establish specialized toxicology labs with qualified personnel where feasible	All	High	Medium
1.1.4. Study the effect of NSAIDs and lead poisoning on health status and population productivity	All	High	Medium
1.2.1. Introduce Anti-poison dog patrols in key sites for the species	Balkans	High	Medium
1.2.2. Introduce dedicated Wildlife Crime Units in relevant authorities. Incentivize reporting and successful persecution violation	Balkans	High	Medium
1.2.3. Increase the use of preventative measures to reduce wildlife conflicts with livestock (e.g. shepherd dogs, fences, etc.). Where appropriate, introduce wildlife damage compensation schemes.	Balkans	High	Medium
1.3.1. Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock	All	Essential	Long
1.3.2. Improve the control over pest control measures	All	Essential	Long
1.3.3. Penalize land owners/managers when poisoning incidents occur on their land	All	Essential	Long
1.3.4. Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	All	Essential	Long
2.1.1. Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information	Central Asia & Caucasus, Middle East, Balkans	Medium	Medium
2.1.2. Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc).	Central Asia & Caucasus, Middle East, Balkans	Medium	Medium
2.2.1. Establish and train dedicated Wildlife Crime Units in relevant authorities. Ensure shooting patrols at bottleneck sites and hot spots of illegal shooting. Incentivize reporting and successful persecution of violators	Middle East	Medium	Medium
2.2.2. Promote alternative hobbies to leisure shooting (e.g. wildlife photography).	Middle East	Medium	Medium
2.3.1. Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	Central Asia & Caucasus, Middle East, Africa	Medium	Long
2.3.2. Improve the control on firearms and hunting licenses where necessary.	Central Asia & Caucasus, Middle East, Africa	Medium	Long
2.3.3. Improve border controls and CITES regulations enforcement to prevent trade of specimens.	Central Asia & Caucasus, Middle East, Africa	Medium	Long
2.3.4. Close down illegal animal trades on black markets.	Central Asia & Caucasus, Middle East, Africa	Medium	Long
3.1.1. Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	Balkans, Middle East, Africa	High	Short
3.1.2. Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	Balkans, Middle East, Africa	High	Short

3.1.3. Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	Balkans, Middle East, Africa	High	Short
3.1.4. Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	Balkans, Middle East, Africa	High	Short
3.2.1. Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	Balkans, Middle East, Africa	<i>Essential</i>	<i>Long</i>
3.2.2. Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	Balkans, Middle East, Africa	<i>Essential</i>	<i>Long</i>
3.3.1. Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	Balkans, Middle East, Africa	<i>High</i>	<i>Long</i>
3.3.2. Encourage sign up to MEAs and international treaties (where needed).	Balkans, Middle East, Africa	<i>Essential</i>	<i>Long</i>
4.1.1. Exchange information, common survey methods and protocols.	Balkans, Central Asia & Caucasus	<i>Low</i>	<i>Long</i>
4.1.2. Map and monitor nests (representative sample where population is large).	Balkans, Central Asia & Caucasus	<i>Low</i>	<i>Long</i>
4.1.3. Identify population and productivity trends.	Balkans, Central Asia & Caucasus	<i>Low</i>	<i>Long</i>
4.1.4. Develop and publish sensitivity maps for the most important sites and habitats of the species.	Balkans, Central Asia & Caucasus	<i>Low</i>	<i>Long</i>
4.1.5. Better understand the populations' connectivity.	Balkans, Central Asia & Caucasus	<i>Low</i>	<i>Long</i>
4.1.6. Map (available) predictable/reliable food sources (e.g. dump sites).	Balkans, Central Asia & Caucasus	<i>Low</i>	<i>Long</i>
4.1.7. Test methods to increase the productivity of wild populations (at least in countries with low productivity, e.g. individual feeding of pairs and nest guarding).	Balkans, Central Asia & Caucasus	<i>Low</i>	<i>Long</i>
4.1.8. Assess feasibility of reintroduction (where appropriate).	Balkans, Central Asia & Caucasus	<i>Low</i>	<i>Long</i>
4.1.9. Test potential to improve 'head-start' of juveniles to avoid mortality due to natural barriers.	<i>Low/Long</i> , Central Asia & Caucasus	<i>Low</i>	<i>Long</i>
4.1.10. Assess how the migrating individuals use ships in Mediterranean with the aim to assess the potential of using artificial islands in Mediterranean.	Balkans, Central Asia & Caucasus	<i>Low</i>	<i>Long</i>
4.2.1. Create a network of "Safe zones" around the core breeding areas.	Balkans, Central Asia & Caucasus	<i>Medium</i>	<i>Long</i>
4.2.2. Provide intensive conservation care (e.g. nest guarding, supplementary feeding) in breeding territories of core importance and high risk.	Balkans, Central Asia & Caucasus	<i>Medium</i>	<i>Long</i>
4.2.3. Improve the size and quality of foraging habitats available to the breeding pairs through appropriate land management (pastoralism, small scale farming, etc.).	Balkans, Central Asia & Caucasus	<i>Medium</i>	<i>Long</i>
4.2.4. Create and manage networks of supplementary feeding stations in core breeding areas (and along the flyway).	Balkans, Central Asia & Caucasus	<i>Medium</i>	<i>Long</i>
4.2.5. Encourage agri-environmental schemes, habitat management schemes and livestock enhancing policies.	Balkans, Central Asia & Caucasus	<i>Medium</i>	<i>Long</i>
4.2.6. Allow vulture-friendly carcass management use (e.g. disposal of animal waste in nature under safe conditions).	Balkans, Central Asia & Caucasus	<i>Medium</i>	<i>Long</i>
4.2.7. Improve management and guarding of protected areas with Egyptian vulture populations.	Balkans, Central Asia & Caucasus	<i>Medium</i>	<i>Long</i>
4.3.1. Adhere to best practice and cooperate within European Endangered Species Programme.	Balkans	<i>Low</i>	<i>Long</i>
4.3.2. Ensure, in the long term, birds for release programmes.	Balkans	<i>Low</i>	<i>Long</i>
5.1.1. Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	All	<i>Essential</i>	<i>Long</i>

5.1.2. Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	All	<i>Essential</i>	<i>Long</i>
5.1.3. Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities).	All	<i>Essential</i>	<i>Long</i>
5.1.4. Increase stakeholders' involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	All	<i>Essential</i>	<i>Long</i>
5.2.1. Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting – i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	Central Asia & Caucasus, Middle East, Africa	Medium	<i>Long</i>
5.2.2. Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	Central Asia & Caucasus, Middle East, Africa	Medium	<i>Long</i>
5.2.3. Organize public events, trainings and workshops.	Central Asia & Caucasus, Middle East, Africa	Medium	<i>Long</i>
5.2.4. Involve farmers and hunters in the conservation activities.	Central Asia & Caucasus, Middle East, Africa	Medium	<i>Long</i>
5.3.1. Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	Balkans, Middle East, Africa	<i>Essential</i>	<i>Long</i>
5.3.2. Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	Balkans, Middle East, Africa	<i>Essential</i>	<i>Long</i>
5.3.3. Produce and promote guidance for good practice and design of the relevant infrastructure.	Balkans, Middle East, Africa	<i>Essential</i>	<i>Long</i>
5.3.4. Trainings and workshops (for electricity companies and other relevant stakeholders).	Balkans, Middle East, Africa	<i>Essential</i>	<i>Long</i>
5.3.5. Involve electricity companies, investors and authorities in conservation.	Balkans, Middle East, Africa	<i>Essential</i>	<i>Long</i>

Annex 2 – Contributors & Acknowledgements

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Nigeria	Solomon Adefolu (Nigerian Conservation Foundation)
North Macedonia	Nenad Petrovski , Metodija Veleviski (Macedonian Ecological Society)
Oman	Ivaylo Angelov (Bulgarian Society for the Protection of Birds)
Romania	Emil Todorov (Romanian Ornithological Society)
Russia	Igor Karyakin , Nurlan Ongarbaev, Mark Pestov, Genrietta Pulikova, Ilya Smelansky, Elvira Nikolenko (Russian Raptor Research and Conservation Network)
Saudi Arabia	Stoyan Nikolov (Bulgarian Society for the Protection of Birds); Mohammed Shobrak (National Center for Wildlife)
Serbia	Uroš Pantović (Vulture Conservation Foundation)
Sudan	Ibrahim Hashim, Farida Hamdan El Sheikh (Sudanese Wildlife Society); Tahani Ali Hassan (College of Natural Resources and Environmental Studies, University of Bahri; Sudanese Wildlife Society)

Syria	Nabegh Ghazal Asswad (Syrian Society for the Conservation of Wildlife); Belal Al-Hayek (Ministry of Local Administration and Environment); George Dauod, Maher Dayyoub (Syrian Society for the Conservation of Wildlife); Ali Thabet (Ministry of Agriculture and Agrarian Reform).
Turkey	Şafak Arslan (Doğa Derneği)
Turkmenistan	Eldar A. Rustamov (Ministry for Agriculture and Environment Protection of Turkmenistan, Menzbier Ornithological Society)
UAE	Salim Javed (Environment Agency-Abu Dhabi)
Uzbekistan	Roman Kashkarov (Uzbekistan Society for the Protection Birds)
Yemen	No response submitted

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Annex 3 - Peer-reviewed publications since 2017

Where publications could be considered under several themes, they are only listed under the most appropriate.

Diet

Al Farsi G., Al Araiimi J., Al Humaidi J., Al Bulushi A., Sarrouf Willson M., McGrady M. & Oli M.K. (2019). Use of the municipal dump site on Masirah Island, Oman by Egyptian Vultures *Neophron percnopterus*, 2013–2018. *Sandgrouse* 41: 7–14.

Karimov, Tahir & Kuliyeve, Gias. (2017). Diet Composition of Four Vulture Species in Azerbaijan. *Ardea*. 105(2):163-168.

Habitat use

Angelov, I. and Hashim, I. (2019). Birds of prey observed during vulture surveys in northeast Sudan. *Scopus*, 39(2):1-8.

Angelov, I., Bougain, C., Schulze, M., al Sariri, T., McGrady, M., Meyburg, B. (2020). Oman confirmed as a stronghold for resident globally endangered Egyptian Vulture (*Neophron percnopterus*). *Ardea* 108: 73-82.

Arkumarev, V., McGrady, M. & Angelov, I. (2019). A literature review of occurrence of Egyptian vulture (*Neophron percnopterus*) resident in Africa. *Vulture News* 77: 1–54.

Buechley, E.R., Oppel, S., Beatty, W.S., Nikolov, S.C., Dobrev, V., Arkumarev, V., Saravia, V., Bougain, C., Bounas, A., Kret, E., Skartsi, T., Aktay, L., Aghababayan, K., Frehner, E., Şekercioglu, Ç.H., (2018) Identifying critical migratory bottlenecks and high use areas for an endangered migratory soaring bird across three continents. *Journal of Avian Biology*, 49(7):1-13

Dobrev, V. & Popgeorgiev, G.S. (2021) Long-distance Exploratory Dispersal of an Immature Egyptian Vulture (*Neophron percnopterus*) from the Balkans. *Ecologia Balkanica* 13(1) 161-165

Hassan T.A, Ismail O.A. (2017) Identification of vulture species around Galagu Station in Dinder National Park. *Biodiversity International Journal*. 2017;1(6):72-75.

McGrady M.J., Karelus D.L., Rayaleh H.A., Sarrouf-Wilson M., Meyburg B.-U., Oli M.K. & Bildstein K. (2019). Home ranges and movements of Egyptian Vultures *Neophron percnopterus* in relation to rubbish dumps in Oman and the Horn of Africa. *Bird Study* 65:544–556

McGrady, M., Schmidt, M., Elahi Rad, Z. & Meyburg, B. (2022) Tracking of an Egyptian Vulture *Neophron percnopterus* as it transitions from being a floater to a territory-holder. *Sandgrouse* 44:122-133.

Oppel, S., Dobrev, V., Arkumarev, V., Saravia, V., Bounas, A., Manolopoulos, A., Kret, E., Veleviski, M., Popgeorgiev, G. S. & Nikolov, S. C. (2016) Landscape factors affecting territory occupancy and breeding success of Egyptian Vultures on the Balkan Peninsula. *Journal of Ornithology*: 58:443–457

Phipps, W.L., López-López, P., Buechley, E.R., Oppel, S., Álvarez, E., Arkumarev, V., Bekmansurov, R., Berger-Tal, O., Bermejo, A., Bounas, A., Alanís, I.C., de la Puente, J., Dobrev, V., Duriez, O., Efrat, R., Fréchet, G., García, J., Galán, M., García-Ripollés, C., Gil, A., Iglesias-Lebrija, J.J., Jambas, J., Karyakin, I.V., Kobierzycki, E., Kret, E., Loercher, F., Monteiro, A., Morant Etxebarria, J., Nikolov, S.C., Pereira, J., Peške, L., Ponchon, C., Realinho, E., Saravia, V., Sekercioglu, C.H., Skartsi, T., Tavares, J., Teodósio, J., Urios, V., Vallverdú, N., (2019) Spatial and temporal variability in migration of a soaring raptor across three continents. *Frontiers in Ecology and Evolution* 7.

Rustamov E., Yankov P., Shcherbina A.A., Atajanov Ya.B., Khodjamuradov Kh.I. (2020). On the state of vulture populations in Turkmenistan. *Materials of the VIII International Conference. Working Group on Birds of Prey of Northern Eurasia*. Voronezh. 425-432. (in Russian).

Shobrak, M., Alasmari, S., Alqthami, A., Alqthami, F., Al-Otaibi, A., Zoubi, M., Moghrabi, E., Jbour, S., Arkumarev, V., Asswad, N., & Nikolov, S.C. (2020) Congregations and threats of migratory Egyptian Vultures *Neophron percnopterus* along the southwest coast of Saudi Arabia. *Sandgrouse* 42(2) 248-258.

Breeding ecology and productivity

Arkumarev, V., Dobrev, V., Stoychev, S., Dobrev, D., Demerdzhiev, D. & Nikolov, S. C. (2018) Breeding performance and population trend of the Egyptian Vulture *Neophron percnopterus* in Bulgaria: conservation implications. *Ornis Fennica*, 95(3):115-127.

Arslan, Ş., Akyol, A. & Özuslu, S. (2022) Breeding biology of the Egyptian Vulture, *Neophron percnopterus*, in the Beypazarı area, Turkey. *Zoology in the Middle East*. 68(3):212-217,

Dobrev, V., Yordanov, E. & Popgeorgiev, G.S. (2021) Copulatory behavior of the Egyptian vulture (*Neophron percnopterus*) in the Eastern Rhodopes, Bulgaria. *Ecologia Balkanica* 13(1):9-16.

Karyakin, I., Nikolenko, E. Knizhov, K., Pulikova, G., Kaptyonkina, A. & Ongarbev, N. (2023) Egyptian vulture population range and size in Kazakhstan. *Acta Zoologica Bulgarica*. Suppl 17, in press.

Meyburg B.-U., McGrady M.J. & Sarrouf-Willson M. 2019. Tracking data suggest that Oman's resident Egyptian Vulture *Neophron percnopterus* population appears much larger than estimated. *British Birds* 112:535–540.

Oppel, S., Dobrev, V., Arkumarev, V., Saravia, V., Bounas, A., Kret, E., Skartsi, T., Veleviski, M., Stoychev, S. & Nikolov, S. C. (2016) Assessing the effectiveness of intensive conservation actions: Does guarding and feeding increase productivity and survival of Egyptian Vultures in the Balkans? *Biological Conservation* 198:157-164.

Survey of Egyptian Vulture in Uzbekistan. April-May 2017; Draft Reporting against Blueprint Actions by Country 11th Annual Meeting of Saving Asia's Vultures from Extinction, Virtual event December 2021, p.94-95

Survival

The Illegal killing of birds in the Arabian Peninsula, Iran and Iraq (2021) BLI Technical Report. 32pp ([link](#))

Bounas, A, Saravia V, Méndez M, Arkumarev V, Aghajanyan L, Ararat K, Buechley E, Dobrev V, Dobrev D, Efrat R, Klisurov I, Kret E, Skartsi T, Oppel, S, Petrov R, Sekercioglu C, Vaidl A, Donazar J, Nikolov, S.C. & Sotiropoulos K. (2023). Assessing genetic diversity patterns at neutral and adaptive loci to inform population reinforcement of an endangered migratory vulture. *Journal of Ornithology*.

Buechley, E., Steffen, S., Efrat, R., Louis, P., Carbonell, I., Alvarez, E., Andreotti, A., Arkumarev, V., Berger-Tal, O., Bermejo Bermejo, A., Bounas, A., Ceccolini, G., Cenerini, A., Dobrev, V., Duriez, O., García Fernández, J., García-Ripollés, C., Galán, M., Gil, A., Giraud, L., Hatzofe, O., José Iglesias, J., Karyakin, I., Kobierzycki, E., Kret, E., Loercher, F., López-López, P., Miller, Y., Müller, T., Nikolov, S., De la Puente, J., Sapir, N., Saravia, V., Sekercioglu, C., Sillett, S., Tavarez, J., Urios, V., Marra, P. (2021). Differential survival throughout the full annual cycle of a migratory bird presents a life history trade-off. *Journal of Animal Ecology*. 90: 1228-1238.

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Oppel, S., Saravia, V., Bounas, A., Arkumarev, V., Kret, E., Dobrev, V., Dobrev, D., Kordopatis, P., Skartsi, T., Veleviski, M., Petrovski, N., Bino, T., Topi, M., Klisurov, I., Stoychev, S., & Nikolov, S. C. (2021). Population reinforcement and demographic changes needed to stabilise the population of a migratory vulture. *Journal of Applied Ecology*, 58: 2711-2721.

Oppel, S., V. Arkumarev, S. Bakari, V. Dobrev, V. Saravia-Mullin, S. Adefolu, L. A. Sözüer, P. T. Apeverga, Ş. Arslan, Y. Barshep, T. Bino, A. Bounas, T. Çetin, M. Dayyoub, D. Dobrev, K. Duro, L. El-Moghrabi, H. ElSafoury, A. Endris, N. G. Asswad, J. H. Harry, S. T. Ivande, S. Jbour, E. Kapsalis, E. Kret, B. A. Mahamued, S. A. Manu, S. Mengistu, A. R. Moussa Zabeirou, S. I. Muhammad, S. Nakev, A. Ngari, J. Onoja, M. Osta, S. Özuslu, N. Petrovski, G. Popgeorgiev, C. Pourchier, T. Qaneer, A. Ruffo, M. Shobrak, L. Sidiropoulos, T. Skartsi, Ö. Sözüer, K. Stara, M. Tesfaye, M. Topi, D. Vavylis, M. Veleviski, Z. Vorpsi, M. Wondafrash, E. Xeka, C. Yenyurt, E. Yordanov, and S. C. Nikolov. (2021). Major threats to a migratory raptor vary geographically along the eastern Mediterranean flyway. *Biological Conservation* 262. 109277.

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Oppel, S., Dobrev, V., Arkumarev, V., Saravia-Mullin, V., Bashmili, K., Bino, T., Bounas, A., Chardin, A., Dobrev, D., Duro, K., Kapsalis, K., Kret, E., Marchant, M., Nakev, S., Petrovski, N., Papaioannou, H., Popgeorgiev, G., Selgjakaj, L., Skarts T., Stamenov, A., Stoychev, S., Topi, M., Vavylis, D., Veleviski, M., Vorpsi, Z., Weston, J., Xeka, E., Xherri, X., Yordanov, E., Nikolov, S.C. (2023). Long-term conservation efforts at flyway scale can halt the population decline in a globally endangered migratory raptor. *In prep*

The Egyptian Vulture New LIFE project has produced many relevant and useful reports which are available on the project website to download: <https://www.lifeneophron.eu/#downloads>.

Annex 4 – Country information sheets

Priority scores (PS) which are different to the EVFAP are in *italic*

Actions which should be complete by this mid-point of the EVFAP according to the timescale they were originally given are **highlighted**.

Actions which were not previously considered for a given region are *highlighted*

Actions with the highest API score and therefore the highest priority for the next 5 years have a score of 3 and 4. Complete actions (API score 0) and actions considered not applicable are also shown.

Albania

National Implementation Score **1.64**

Action	PS	IS	Description	API
1.1.1	3	2	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	2
1.1.2	3	3	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	1
1.1.3	3	2	Establish specialized toxicology labs with qualified personnel where feasible.	2
1.1.4	3	1	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	3
1.2.1	3	1	Introduce Anti-poison dog patrols in key sites for the species.	3
1.2.2	3	2	Introduce dedicated Wildlife Crime Units in relevant authorities. Incentivize reporting and successful persecution violation.	2
1.2.3	3	1	Increase the use of preventative measures to reduce wildlife conflicts with livestock (e.g. shepherd dogs, fences, etc.). Where appropriate, introduce wildlife damage compensation schemes.	3
1.3.1	4	1	Strengthen the control of agro chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	4
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	4	1	Penalize landowners/managers when poisoning incidents occur on their land.	4
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.1.1	2	1	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	2
2.1.2	2	2	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc.).	1.33
3.1.1	3	4	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	0
3.1.2	3	2	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	2
3.1.3	3	1	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	3
3.1.4	3	2	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	2
3.2.1	4	1	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	4
3.2.2	4	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	4
3.3.1	3	1	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	3
3.3.2	3	1	Encourage sign up to MEAs and international treaties (where needed).	3
4.1.1	1	3	Exchange information, common survey methods and protocols.	0.33
4.1.10	1	1	Assess how the migrating individuals use ships in Mediterranean with the aim to assess the potential of using artificial islands in Mediterranean.	1
4.1.2	1	3	Map and monitor nests (representative sample where population is large).	0.33

4.1.3	1	3	identify population and productivity trends	0.33
4.1.4	1	1	Develop and publish sensitivity maps for the most important sites and habitats of the species.	1
4.1.5	1	2	Better understand the populations connectivity.	0.67
4.1.6	1	2	Map (available) predictable/reliable food sources (e.g. dump sites).	0.67
4.1.7	1	4	Test methods to increase the productivity of wild populations (at least in countries with low productivity, e.g. individual feeding of pairs and nest guarding).	0
4.1.8	1	1	Assess feasibility of reintroduction (where appropriate).	1
4.1.9	1	1	Test potential to improve head-start of juveniles to avoid mortality due to natural barriers.	1
4.2.1	2	2	Create a network of safe zones around the core breeding areas.	1.33
4.2.2	2	3	Provide intensive conservation care (e.g. nest guarding, supplementary feeding) in breeding territories of core importance and high risk.	0.67
4.2.3	2	1	Improve the size and quality of foraging habitats available to the breeding pairs through appropriate land management (pastoralism, small scale farming, etc.).	2
4.2.4	2	3	Create and manage networks of supplementary feeding stations in core breeding areas (and along the flyway).	0.67
4.2.5	2	1	Encourage agri-environmental schemes, habitat management schemes and livestock enhancing policies.	2
4.2.6	2	1	Allow vulture-friendly carcass management use (e.g. disposal of animal waste in nature under safe conditions).	2
4.2.7	2	2	Improve management and guarding of protected areas with Egyptian vulture populations.	1.33
4.3.1	1	1	Adhere to best practice and cooperate within European Endangered Species Programme.	1
4.3.2	1	1	Ensure, in the long term, birds for release programmes.	1
5.1.1	4	2	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	2.67
5.1.2	4	1	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	4
5.1.3	4	2	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities	2.67
5.1.4	4	2	Increase stakeholders' involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	2.67
5.3.1	4	2	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	2.67
5.3.2	4	2	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	2.67
5.3.3	4	2	Produce and promote guidance for good practice and design of the relevant infrastructure.	2.67
5.3.4	4	1	Trainings and workshops (for electricity companies and other relevant stakeholders).	4
5.3.5	4	2	Involve electricity companies, investors and authorities in conservation.	2.67

Priority actions

- Anti-poison work
- Energy infrastructure
- Awareness raising expected results.

Armenia

National Implementation Score 1.03

Action	PS	IS	Description	API
1.1.1	4	2	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	2.67
1.1.2	3	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	3
1.1.3	3	1	Establish specialized toxicology labs with qualified personnel where feasible.	3
1.1.4	1	1	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	1
1.2.3	3	1	Increase the use of preventative measures to reduce wildlife conflicts with livestock (e.g. shepherd dogs, fences, etc.). Where appropriate, introduce wildlife damage compensation schemes.	3
1.3.1	1	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	1
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	3	1	Penalize land owners/managers when poisoning incidents occur on their land.	3
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.1.1	2	1	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	2
2.1.2	2	1	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc.).	2
2.2.1	2	1	Establish and train dedicated Wildlife Crime Units in relevant authorities. Ensure shooting patrols at bottleneck sites and hot spots of illegal shooting. Incentivize reporting and successful persecution of violators.	2
2.2.2	2	1	Promote alternative hobbies to leisure shooting (e.g. wildlife photography).	2
2.3.1	2	1	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	2
2.3.2	2	1	Improve the control on fire arms and hunting licenses where necessary.	2
2.3.3	2	1	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	2
2.3.4	2	1	Close down illegal animal trades on black markets.	2
3.1.1	3	1	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	3
3.1.2	3	1	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	3
3.1.3	3	1	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	3
3.1.4	3	1	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	3
3.2.1	4	1	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	4
3.2.2	4	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	4
3.3.1	3	1	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	3
3.3.2	3	1	Encourage sign up to MEAs and international treaties (where needed).	3
4.1.1	3	1	Exchange information, common survey methods and protocols.	3
4.1.10	3	n/a	Assess how the migrating individuals use ships in Mediterranean with the aim to assess the potential of using artificial islands in Mediterranean.	n/a
4.1.2	3	1	Map and monitor nests (representative sample where population is large).	3
4.1.3	3	1	identify population and productivity trends	3
4.1.4	3	1	Develop and publish sensitivity maps for the most important sites and habitats of the species.	3
4.1.5	3	1	Better understand the populations connectivity.	3
4.1.6	3	1	Map (available) predictable/reliable food sources (e.g. dump sites).	3
4.1.7	3	n/a	Test methods to increase the productivity of wild populations (at least in countries with low productivity, e.g. individual feeding of pairs and nest guarding).	n/a
4.1.8	3	n/a	Assess feasibility of reintroduction (where appropriate).	n/a
4.1.9	3	n/a	Test potential to improve head-start of juveniles to avoid mortality due to natural barriers.	n/a
4.2.1	3	1	Create a network of safe zones around the core breeding areas.	3

4.2.2	3	n/a	Provide intensive conservation care (e.g. nest guarding, supplementary feeding) in breeding territories of core importance and high risk.	n/a
4.2.3	3	1	Improve the size and quality of foraging habitats available to the breeding pairs through appropriate land management (pastoralism, small scale farming, etc.).	3
4.2.4	3	1	Create and manage networks of supplementary feeding stations in core breeding areas (and along the flyway).	3
4.2.5	3	n/a	Encourage agri-environmental schemes, habitat management schemes and livestock enhancing policies.	n/a
4.2.6	3	1	Allow vulture-friendly carcass management use (e.g. disposal of animal waste in nature under safe conditions).	3
4.2.7	3	1	Improve management and guarding of protected areas with Egyptian vulture populations.	3
5.1.1	4	1	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	4
5.1.2	4	1	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	4
5.1.3	4	1	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	4
5.1.4	4	1	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	4
5.2.1	2	1	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	2
5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	1	Organize public events, training s and workshops.	2
5.2.4	2	1	Involve farmers and hunters in the conservation activities.	2
5.3.1	4	1	<i>Increase awareness regarding the impacts of electrocution and collisions with infrastructure.</i>	4
5.3.2	4	1	<i>Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.</i>	4
5.3.3	4	1	<i>Produce and promote guidance for good practice and design of the relevant infrastructure.</i>	4
5.3.4	4	1	<i>Trainings and workshops (for electricity companies and other relevant stakeholders).</i>	4
5.3.5	4	1	<i>Involve electricity companies, investors and authorities in conservation.</i>	4

Priority actions

- Anti-poisoning work
- Energy infrastructure
- Increasing measures to improve the understanding and status of breeding pairs.

Azerbaijan

National Implementation Score 1.00

Action	PS	IS	Description	API
1.1.1	3	1	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	3
1.1.2	3	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	3
1.1.3	2	1	Establish specialized toxicology labs with qualified personnel where feasible.	2
1.1.4	1	1	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	1
1.2.3	3	1	Increase the use of preventative measures to reduce wildlife conflicts with livestock (e.g. shepherd dogs, fences, etc.). Where appropriate, introduce wildlife damage compensation schemes.	3
1.3.1	2	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	2
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	4	1	Penalize land owners/managers when poisoning incidents occur on their land.	4
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.1.1	2	1	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	2
2.1.2	2	1	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc.).	2
2.2.1	2	1	Establish and train dedicated Wildlife Crime Units in relevant authorities. Ensure shooting patrols at bottleneck sites and hot spots of illegal shooting. Incentivize reporting and successful persecution of violators.	2
2.2.2	2	1	Promote alternative hobbies to leisure shooting (e.g. wildlife photography).	2
2.3.1	2	1	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	2
2.3.2	2	1	Improve the control on fire arms and hunting licenses where necessary.	2
2.3.3	2	1	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	2
2.3.4	2	1	Close down illegal animal trades on black markets.	2
3.1.1	3	1	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	3
3.1.2	3	1	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	3
3.1.3	3	1	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	3
3.1.4	3	1	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	3
3.2.1	4	1	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	4
3.2.2	4	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	4
3.3.1	3	1	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	3
3.3.2	3	1	Encourage sign up to MEAs and international treaties (where needed).	3
4.1.1	3	1	Exchange information, common survey methods and protocols.	3
4.1.2	3	1	Map and monitor nests (representative sample where population is large).	3
4.1.3	3	1	Identify population and productivity trends	3
4.1.4	3	1	Develop and publish sensitivity maps for the most important sites and habitats of the species.	3
4.1.5	3	1	Better understand the populations connectivity.	3
4.1.6	3	1	Map (available) predictable/reliable food sources (e.g. dump sites).	3
4.1.7	3	n/a	Test methods to increase the productivity of wild populations (at least in countries with low productivity, e.g. individual feeding of pairs and nest guarding).	n/a
4.1.8	3	n/a	Assess feasibility of reintroduction (where appropriate).	n/a
4.1.9	3	n/a	Test potential to improve head-start of juveniles to avoid mortality due to natural barriers.	n/a
4.1.10	3	n/a	Assess how the migrating individuals use ships in Mediterranean with the aim to assess the potential of using artificial islands in Mediterranean.	n/a
4.2.1	3	1	Create a network of safe zones around the core breeding areas.	3

4.2.2	3	n/a	Provide intensive conservation care (e.g. nest guarding, supplementary feeding) in breeding territories of core importance and high risk.	n/a
4.2.3	3	n/a	Improve the size and quality of foraging habitats available to the breeding pairs through appropriate land management (pastoralism, small scale farming, etc.).	n/a
4.2.4	3	1	Create and manage networks of supplementary feeding stations in core breeding areas (and along the flyway).	3
4.2.5	3	n/a	Encourage agri-environmental schemes, habitat management schemes and livestock enhancing policies.	n/a
4.2.6	3	n/a	Allow vulture-friendly carcass management use (e.g. disposal of animal waste in nature under safe conditions).	n/a
4.2.7	3	1	Improve management and guarding of protected areas with Egyptian vulture populations.	3
5.1.1	4	1	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	4
5.1.2	4	1	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	4
5.1.3	4	1	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	4
5.1.4	4	1	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	4
5.2.1	2	1	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting " i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	2
5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	1	Organize public events, training s and workshops.	2
5.2.4	2	1	Involve farmers and hunters in the conservation activities.	2
5.3.1	4	1	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	4
5.3.2	4	1	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	4
5.3.3	4	1	Produce and promote guidance for good practice and design of the relevant infrastructure.	4
5.3.4	4	1	Trainings and workshops (for electricity companies and other relevant stakeholders).	4
5.3.5	4	1	Involve electricity companies, investors and authorities in conservation.	4

Priority actions

- Anti-poisoning
- Energy infrastructure
- Increasing measures to improve the understanding and status of breeding pairs

Bulgaria

National Implementation Score 2.48

Action	PS	IS	Description	API
1.1.1	3	4	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	0
1.1.2	3	4	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	0
1.1.3	3	2	Establish specialized toxicology labs with qualified personnel where feasible.	2
1.1.4	3	2	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	2
1.2.1	3	3	Introduce Anti-poison dog patrols in key sites for the species.	1
1.2.2	3	3	Introduce dedicated Wildlife Crime Units in relevant authorities. Incentivize reporting and successful persecution violation.	1
1.2.3	3	2	Increase the use of preventative measures to reduce wildlife conflicts with livestock (e.g. shepherd dogs, fences, etc.). Where appropriate, introduce wildlife damage compensation schemes.	2
1.3.1	4	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	4
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	4	1	Penalize land owners/managers when poisoning incidents occur on their land.	4
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.1.1	2	1	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	2
2.1.2	2	1	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc).	2
3.1.1	3	4	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	0
3.1.2	3	4	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	0
3.1.3	3	1	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	3
3.1.4	3	1	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	3
3.2.1	4	2	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	2.67
3.2.2	4	2	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	2.67
3.3.1	3	1	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	3
3.3.2	3	1	Encourage sign up to MEAs and international treaties (where needed).	3
4.1.1	1	4	Exchange information, common survey methods and protocols.	0
4.1.2	1	4	Map and monitor nests (representative sample where population is large).	0
4.1.3	1	4	Identify population and productivity trends	0
4.1.4	1	2	Develop and publish sensitivity maps for the most important sites and habitats of the species.	0.67
4.1.5	1	3	Better understand the populations connectivity.	0.33
4.1.6	1	3	Map (available) predictable/reliable food sources (e.g. dump sites).	0.33
4.1.7	1	4	Test methods to increase the productivity of wild populations (at least in countries with low productivity, e.g. individual feeding of pairs and nest guarding).	0
4.1.8	1	4	Assess feasibility of reintroduction (where appropriate).	0
4.1.9	1	4	Test potential to improve head-start of juveniles to avoid mortality due to natural barriers.	0
4.1.10	1	n/a	Assess how the migrating individuals use ships in Mediterranean with the aim to assess the potential of using artificial islands in Mediterranean.	n/a
4.2.1	2	1	Create a network of safe zones around the core breeding areas.	2
4.2.2	2	4	Provide intensive conservation care (e.g. nest guarding, supplementary feeding) in breeding territories of core importance and high risk.	0
4.2.3	2	1	Improve the size and quality of foraging habitats available to the breeding pairs through appropriate land management (pastoralism, small scale farming, etc.).	2
4.2.4	2	3	Create and manage networks of supplementary feeding stations in core breeding areas (and along the flyway).	0.67
4.2.5	2	1	Encourage agri-environmental schemes, habitat management schemes and livestock enhancing policies.	2

4.2.6	2	1	Allow vulture-friendly carcass management use (e.g. disposal of animal waste in nature under safe conditions).	2
4.2.7	2	2	Improve management and guarding of protected areas with Egyptian vulture populations.	1.33
4.3.1	1	4	Adhere to best practice and cooperate within European Endangered Species Programme.	0
4.3.2	1	3	Ensure, in the long term, birds for release programmes.	0.33
5.1.1	4	3	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	1.33
5.1.2	4	3	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	1.33
5.1.3	4	3	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	1.33
5.3.1	4	4	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	0
5.3.2	4	3	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	1.33
5.3.3	4	4	Produce and promote guidance for good practice and design of the relevant infrastructure.	0
5.3.4	4	3	Trainings and workshops (for electricity companies and other relevant stakeholders).	1.33
5.3.5	4	4	Involve electricity companies, investors and authorities in conservation.	0
5.1.4	4	3	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	1.33

Priority actions

- Legal control of hazardous substances
- Identifying further areas for mitigating energy infrastructure

Djibouti

National Implementation Score 1.02

Action	PS	IS	Description	API
1.1.1	3	n/a	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	n/a
1.1.2	3	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	3
1.1.3	3	n/a	Establish specialized toxicology labs with qualified personnel where feasible.	n/a
1.1.4	3	n/a	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	n/a
1.3.1	4	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	4
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	4	1	Penalize land owners/managers when poisoning incidents occur on their land.	4
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.3.1	2	1	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	2
2.3.2	2	1	Improve the control on fire arms and hunting licenses where necessary.	2
2.3.3	2	1	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	2
2.3.4	2	1	Close down illegal animal trades on black markets.	2
3.1.1	3	1	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	3
3.1.2	3	1	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	3
3.1.3	3	1	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	3
3.1.4	3	1	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	3
3.2.1	4	1	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	4
3.2.2	4	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	4
3.3.1	3	1	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	3
3.3.2	3	1	Encourage sign up to MEAs and international treaties (where needed).	3
5.1.1	4	1	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	4
5.1.2	4	1	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	4
5.1.3	4	1	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	4
5.1.4	4	1	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	4
5.2.1	2	n/a	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting "i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	n/a
5.2.2	2	2	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	1.33
5.2.3	2	1	Organize public events, training s and workshops.	2
5.2.4	2	1	Involve farmers and hunters in the conservation activities.	2
5.3.1	4	1	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	4
5.3.2	4	1	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	4
5.3.3	4	1	Produce and promote guidance for good practice and design of the relevant infrastructure.	4
5.3.4	4	1	Trainings and workshops (for electricity companies and other relevant stakeholders).	4
5.3.5	4	1	Involve electricity companies, investors and authorities in conservation.	4

Priority actions

- Anti-poisoning work
- Energy infrastructure.

Egypt

National Implementation Score 1.42

Action	PS	IS	Description	API
1.1.1	3	2	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	2
1.1.2	3	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	3
1.1.3	3	1	Establish specialized toxicology labs with qualified personnel where feasible.	3
1.1.4	3	1	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	3
1.2.1	4	1	Introduce Anti-poison dog patrols in key sites for the species.	4
1.2.2	4	2	Introduce dedicated Wildlife Crime Units in relevant authorities. Incentivize reporting and successful persecution violation.	2.67
1.2.3	4	1	Increase the use of preventative measures to reduce wildlife conflicts with livestock (e.g. shepherd dogs, fences, etc.). Where appropriate, introduce wildlife damage compensation schemes.	4
1.3.1	4	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	4
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	4	1	Penalize land owners/managers when poisoning incidents occur on their land.	4
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.1.1	3	3	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	1
2.1.2	3	2	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc).	2
2.2.1	3	1	Establish and train dedicated Wildlife Crime Units in relevant authorities. Ensure shooting patrols at bottleneck sites and hot spots of illegal shooting. Incentivize reporting and successful persecution of violators.	3
2.2.2	3	1	Promote alternative hobbies to leisure shooting (e.g. wildlife photography).	3
2.3.1	3	1	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	3
2.3.2	3	1	Improve the control on fire arms and hunting licenses where necessary.	3
2.3.3	3	1	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	3
2.3.4	3	2	Close down illegal animal trades on black markets.	2
3.1.1	3	2	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	2
3.1.2	3	2	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	2
3.1.3	3	2	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	2
3.1.4	3	2	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	2
3.2.1	4	1	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	4
3.2.2	4	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	4
3.3.1	3	2	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	2
3.3.2	3	2	Encourage sign up to MEAs and international treaties (where needed).	2
5.1.1	4	2	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	2.67
5.1.2	4	1	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	4
5.1.3	4	1	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	4
5.1.4	4	1	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	4
5.2.1	2	2	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting – i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	1.33
5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	2	Organize public events, training s and workshops.	1.33

5.2.4	2	1	Involve farmers and hunters in the conservation activities.	2
5.3.1	4	1	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	4
5.3.2	4	2	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	2.67
5.3.3	4	1	Produce and promote guidance for good practice and design of the relevant infrastructure.	4
5.3.4	4	2	Trainings and workshops (for electricity companies and other relevant stakeholders).	2.67
5.3.5	4	2	Involve electricity companies, investors and authorities in conservation.	2.67

Priority actions

- Threat of poisoning
- Energy infrastructure

Research activities have included monitoring of the breeding Egyptian Vulture population in protected areas and other important sites and migration counts at Galala.

Ethiopia

National Implementation Score 1.83

Action	PS	IS	Description	API
1.1.1	3	3	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	1
1.1.2	3	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	3
1.1.3	3	1	Establish specialized toxicology labs with qualified personnel where feasible.	3
1.1.4	3	2	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	2
1.3.1	4	2	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	2.67
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	4	1	Penalize land owners/managers when poisoning incidents occur on their land.	4
1.3.4	4	2	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	2.67
2.1.1	2	n/a	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	n/a
2.1.2	2	n/a	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc).	n/a
2.2.1	2	1	Establish and train dedicated Wildlife Crime Units in relevant authorities. Ensure shooting patrols at bottleneck sites and hot spots of illegal shooting. Incentivize reporting and successful persecution of violators.	2
2.2.2	2	1	Promote alternative hobbies to leisure shooting (e.g. wildlife photography).	2
2.3.1	2	1	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	2
2.3.2	2	1	Improve the control on firearms and hunting licenses where necessary.	2
2.3.3	2	1	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	2
2.3.4	2	1	Close down illegal animal trades on black markets.	2
3.1.1	3	3	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	1
3.1.2	3	3	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	1
3.1.3	3	2	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	2
3.1.4	3	2	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	2
3.2.1	4	2	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	2.67
3.2.2	4	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	4
3.3.1	3	1	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	3
3.3.2	3	1	Encourage sign up to MEAs and international treaties (where needed).	3
5.1.1	4	2	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	2.67
5.1.2	4	2	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	2.67
5.1.3	4	1	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	4
5.1.4	4	2	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	2.67
5.2.1	2	3	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	0.67
5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	2	Organize public events, training s and workshops.	1.33
5.2.4	2	2	Involve farmers and hunters in the conservation activities.	1.33
5.3.1	4	3	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	1.33
5.3.2	4	2	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	2.67

5.3.3	4	2	Produce and promote guidance for good practice and design of the relevant infrastructure.	2.67
5.3.4	4	3	Trainings and workshops (for electricity companies and other relevant stakeholders).	1.33
5.3.5	4	3	Involve electricity companies, investors and authorities in conservation.	1.33

Priority actions

- Mitigating the threat of poisoning
- Energy infrastructure

Georgia

National Implementation Score 1.00

Action	PS	IS	Description	API
1.1.1	3	1	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	3
1.1.2	3	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	3
1.1.3	2	1	Establish specialized toxicology labs with qualified personnel where feasible.	2
1.1.4	1	1	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	1
1.2.3	3	1	Increase the use of preventative measures to reduce wildlife conflicts with livestock (e.g. shepherd dogs, fences, etc.). Where appropriate, introduce wildlife damage compensation schemes.	3
1.3.1	4	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	4
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	3	1	Penalize land owners/managers when poisoning incidents occur on their land.	3
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.1.1	2	1	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	2
2.1.2	2	1	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc.).	2
2.2.1	2	1	Establish and train dedicated Wildlife Crime Units in relevant authorities. Ensure shooting patrols at bottleneck sites and hot spots of illegal shooting. Incentivize reporting and successful persecution of violators.	2
2.2.2	2	1	Promote alternative hobbies to leisure shooting (e.g. wildlife photography).	2
2.3.1	2	1	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	2
2.3.2	2	1	Improve the control on firearms and hunting licenses where necessary.	2
2.3.3	2	1	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	2
2.3.4	2	1	Close down illegal animal trades on black markets.	2
3.1.1	3	1	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	3
3.1.2	3	1	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	3
3.1.3	3	1	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	3
3.1.4	3	1	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	3
3.2.1	4	1	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	4
3.2.2	4	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	4
3.3.1	3	1	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	3
3.3.2	3	1	Encourage sign up to MEAs and international treaties (where needed).	3
4.1.1	3	1	Exchange information, common survey methods and protocols.	3
4.1.2	3	1	Map and monitor nests (representative sample where population is large).	3
4.1.3	3	1	Identify population and productivity trends	3
4.1.4	3	1	Develop and publish sensitivity maps for the most important sites and habitats of the species.	3
4.1.5	3	1	Better understand the populations connectivity.	3
4.1.6	3	1	Map (available) predictable/reliable food sources (e.g. dump sites).	3
4.1.7	3	n/a	Test methods to increase the productivity of wild populations (at least in countries with low productivity, e.g. individual feeding of pairs and nest guarding).	n/a
4.1.8	3	n/a	Assess feasibility of reintroduction (where appropriate).	n/a
4.1.9	3	n/a	Test potential to improve head-start of juveniles to avoid mortality due to natural barriers.	n/a
4.1.10	3	n/a	Assess how the migrating individuals use ships in Mediterranean with the aim to assess the potential of using artificial islands in Mediterranean.	n/a
4.2.1	3	1	Create a network of safe zones around the core breeding areas.	3

4.2.2	3	1	Provide intensive conservation care (e.g. nest guarding, supplementary feeding) in breeding territories of core importance and high risk.	3
4.2.3	3	1	Improve the size and quality of foraging habitats available to the breeding pairs through appropriate land management (pastoralism, small scale farming, etc.).	3
4.2.4	3	1	Create and manage networks of supplementary feeding stations in core breeding areas (and along the flyway).	3
4.2.5	3	n/a	Encourage agri-environmental schemes, habitat management schemes and livestock enhancing policies.	n/a
4.2.6	3	1	Allow vulture-friendly carcass management use (e.g. disposal of animal waste in nature under safe conditions).	3
4.2.7	3	1	Improve management and guarding of protected areas with Egyptian vulture populations.	3
5.1.1	4	1	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	4
5.1.2	4	1	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	4
5.1.3	4	1	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	4
5.1.4	4	1	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	4
5.2.1	2	1	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	2
5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	1	Organize public events, trainings and workshops.	2
5.2.4	2	1	Involve farmers and hunters in the conservation activities.	2
5.3.1	4	1	<i>Increase awareness regarding the impacts of electrocution and collisions with infrastructure.</i>	4
5.3.2	4	1	<i>Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.</i>	4
5.3.3	4	1	<i>Produce and promote guidance for good practice and design of the relevant infrastructure.</i>	4
5.3.4	4	1	<i>Trainings and workshops (for electricity companies and other relevant stakeholders).</i>	4
5.3.5	4	1	<i>Involve electricity companies, investors and authorities in conservation.</i>	4

Priority actions

- Threat of poisoning
- Energy infrastructure.
- Increasing measures to improve the understanding and status of breeding pairs.

Greece

National Implementation Score 2.12

Action	PS	IS	Description	API
1.1.1	3	3	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	1
1.1.2	3	3	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	1
1.1.3	3	2	Establish specialized toxicology labs with qualified personnel where feasible.	2
1.1.4	3	3	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	1
1.2.1	3	4	Introduce Anti-poison dog patrols in key sites for the species.	0
1.2.2	3	1	Introduce dedicated Wildlife Crime Units in relevant authorities. Incentivize reporting and successful persecution violation.	3
1.2.3	3	3	Increase the use of preventative measures to reduce wildlife conflicts with livestock (e.g. shepherd dogs, fences, etc.). Where appropriate, introduce wildlife damage compensation schemes.	1
1.3.1	4	2	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	2.67
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	4	n/a	Penalize land owners/managers when poisoning incidents occur on their land.	n/a
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.1.1	2	1	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	2
2.1.2	2	n/a	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc).	n/a
3.1.1	3	3	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	1
3.1.2	3	2	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	2
3.1.3	3	2	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	2
3.1.4	3	2	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	2
3.2.1	4	1	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	4
3.2.2	4	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	4
3.3.1	3	1	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	3
3.3.2	3	2	Encourage sign up to MEAs and international treaties (where needed).	2
4.1.1	1	4	Exchange information, common survey methods and protocols.	0
4.1.2	1	4	Map and monitor nests (representative sample where population is large).	0
4.1.3	1	4	Identify population and productivity trends	0
4.1.4	1	3	Develop and publish sensitivity maps for the most important sites and habitats of the species.	0.33
4.1.5	1	3	Better understand the populations connectivity.	0.33
4.1.6	1	2	Map (available) predictable/reliable food sources (e.g. dump sites).	0.67
4.1.7	1	4	Test methods to increase the productivity of wild populations (at least in countries with low productivity, e.g. individual feeding of pairs and nest guarding).	0
4.1.8	1	4	Assess feasibility of reintroduction (where appropriate).	0
4.1.9	1	3	Test potential to improve head-start of juveniles to avoid mortality due to natural barriers.	0.33
4.1.10	1	1	Assess how the migrating individuals use ships in Mediterranean with the aim to assess the potential of using artificial islands in Mediterranean.	1
4.2.1	2	2	Create a network of safe zones around the core breeding areas.	1.33
4.2.2	2	3	Provide intensive conservation care (e.g. nest guarding, supplementary feeding) in breeding territories of core importance and high risk.	0.67
4.2.3	2	1	Improve the size and quality of foraging habitats available to the breeding pairs through appropriate land management (pastoralism, small scale farming, etc.).	2
4.2.4	2	3	Create and manage networks of supplementary feeding stations in core breeding areas (and along the flyway).	0.67
4.2.5	2	1	Encourage agri-environmental schemes, habitat management schemes and livestock enhancing policies.	2

4.2.6	2	1	Allow vulture-friendly carcass management use (e.g. disposal of animal waste in nature under safe conditions).	2
4.2.7	2	2	Improve management and guarding of protected areas with Egyptian vulture populations.	1.33
4.3.1	1	3	Adhere to best practice and cooperate within European Endangered Species Programme.	0.33
4.3.2	1	1	Ensure, in the long term, birds for release programmes.	1
5.1.1	4	3	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	1.33
5.1.2	4	3	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	1.33
5.1.3	4	3	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	1.33
5.3.1	4	2	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	2.67
5.3.2	4	2	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	2.67
5.3.3	4	2	Produce and promote guidance for good practice and design of the relevant infrastructure.	2.67
5.3.4	4	1	Trainings and workshops (for electricity companies and other relevant stakeholders).	4
5.3.5	4	1	Involve electricity companies, investors and authorities in conservation.	4
5.1.4	4	3	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	1.33

Priority actions

- Legal control hazardous substances
- Mitigating the threat of energy infrastructure.

Iraq

National Implementation Score 1

Action	PS	IS	Description	API
1.1.1	3	1	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	3
1.1.2	3	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	3
1.1.3	3	1	Establish specialized toxicology labs with qualified personnel where feasible.	3
1.1.4	3	1	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	3
1.3.1	4	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	4
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	4	1	Penalize land owners/managers when poisoning incidents occur on their land.	4
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.1.1	3	1	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	3
2.1.2	3	1	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc).	3
2.2.1	3	1	Establish and train dedicated Wildlife Crime Units in relevant authorities. Ensure shooting patrols at bottleneck sites and hot spots of illegal shooting. Incentivize reporting and successful persecution of violators.	3
2.2.2	3	1	Promote alternative hobbies to leisure shooting (e.g. wildlife photography).	3
2.3.1	3	1	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	3
2.3.2	3	1	Improve the control on firearms and hunting licenses where necessary.	3
2.3.3	3	1	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	3
2.3.4	3	1	Close down illegal animal trades on black markets.	3
3.1.1	3	1	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	3
3.1.2	3	1	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	3
3.1.3	3	1	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	3
3.1.4	3	1	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	3
3.2.1	4	1	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	4
3.2.2	2	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	2
3.3.1	3	1	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	3
3.3.2	3	1	Encourage sign up to MEAs and international treaties (where needed).	3
5.1.1	4	1	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	4
5.1.2	4	1	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	4
5.1.3	4	1	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	4
5.1.4	4	1	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	4
5.2.1	2	1	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	2
5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	1	Organize public events, training s and workshops.	2
5.2.4	2	1	Involve farmers and hunters in the conservation activities.	2
5.3.1	4	1	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	4
5.3.2	4	1	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	4

5.3.3	4	1	Produce and promote guidance for good practice and design of the relevant infrastructure.	4
5.3.4	4	1	Trainings and workshops (for electricity companies and other relevant stakeholders).	4
5.3.5	4	1	Involve electricity companies, investors and authorities in conservation.	4

Priority actions

- Associated with the threat of poisoning and IKB
- Energy infrastructure
- Stakeholder engagement

Israel

National Implementation Score 2.27

Action	PS	IS	Description	API
1.1.1	3	3	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	1
1.1.2	3	4	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	0
1.1.3	3	3	Establish specialized toxicology labs with qualified personnel where feasible.	1
1.1.4	3	2	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	2
1.2.1	3	2	Introduce Anti-poison dog patrols in key sites for the species.	2
1.2.2	3	1	Introduce dedicated Wildlife Crime Units in relevant authorities. Incentivize reporting and successful persecution violation.	3
1.2.3	3	1	Increase the use of preventative measures to reduce wildlife conflicts with livestock (e.g. shepherd dogs, fences, etc.). Where appropriate, introduce wildlife damage compensation schemes.	3
1.3.1	4	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	4
1.3.2	4	3	Improve the control over pest control measures.	1.33
1.3.3	4	1	Penalize land owners/managers when poisoning incidents occur on their land.	4
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.1.1	3	3	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	1
2.1.2	3	n/a	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc.).	n/a
2.2.1	3	1	Establish and train dedicated Wildlife Crime Units in relevant authorities. Ensure shooting patrols at bottleneck sites and hot spots of illegal shooting. Incentivize reporting and successful persecution of violators.	3
2.2.2	3	n/a	Promote alternative hobbies to leisure shooting (e.g. wildlife photography).	n/a
2.3.1	3	n/a	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	n/a
2.3.2	3	n/a	Improve the control on fire arms and hunting licenses where necessary.	n/a
2.3.3	3	n/a	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	n/a
2.3.4	3	n/a	Close down illegal animal trades on black markets.	n/a
3.1.1	3	3	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	1
3.1.2	3	4	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	0
3.1.3	3	4	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	0
3.1.4	3	3	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	1
3.2.1	4	2	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	2.67
3.2.2	4	2	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	2.67
3.3.1	3	3	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	1
3.3.2	3	4	Encourage sign up to MEAs and international treaties (where needed).	0
5.1.1	4	2	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	2.67
5.1.2	4	2	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	2.67
5.1.3	4	1	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	4
5.3.1	4	4	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	0
5.3.2	4	3	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	1.33
5.3.3	4	3	Produce and promote guidance for good practice and design of the relevant infrastructure.	1.33
5.3.4	4	2	Trainings and workshops (for electricity companies and other relevant stakeholders).	2.67
5.3.5	4	3	Involve electricity companies, investors and authorities in conservation.	1.33

5.2.1	2	1	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting “ i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	2
5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	2	Organize public events, training s and workshops.	1.33
5.2.4	2	1	Involve farmers and hunters in the conservation activities.	2
5.1.4	4	1	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	4

Priority actions

- Stakeholder engagement
- Establishing Wildlife Crime Units

Estimated breeding population has changed, now estimated to be about 60-70 pairs throughout Israel. Importantly, this does not represent an increase in the population size, but rather an improvement of breeding surveys. There is currently no natural wintering population in Israel. The only wintering EV are reintroduced birds that are released to the wild in winter (December) and only migrate in the following autumn, thus 3-8 EV stay in Israel every year.

A 5-year study (2017-2022) of survival and behaviour of both captive-bred and wild Egyptian vultures, including GPS tagging and tracking, led by the INPA, Ben-Gurion University of the Negev and Haifa University.

Jordan

National Implementation Score **2.70**

Action	PS	IS	Description	API
1.1.1	3	3	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	1
1.1.2	3	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	3
1.1.3	3	1	Establish specialized toxicology labs with qualified personnel where feasible.	3
1.1.4	3	3	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	1
1.3.1	4	2	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	2.67
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	4	1	Penalize land owners/managers when poisoning incidents occur on their land.	4
1.3.4	4	3	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	1.33
2.1.1	3	4	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	0
2.1.2	3	4	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc.).	0
2.2.1	3	3	Establish and train dedicated Wildlife Crime Units in relevant authorities. Ensure shooting patrols at bottleneck sites and hot spots of illegal shooting. Incentivize reporting and successful persecution of violators.	1
2.2.2	3	2	Promote alternative hobbies to leisure shooting (e.g. wildlife photography).	2
2.3.1	3	3	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	1
2.3.2	3	3	Improve the control on firearms and hunting licenses where necessary.	1
2.3.3	3	4	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	0
2.3.4	3	4	Close down illegal animal trades on black markets.	0
3.1.1	3	3	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	1
3.1.2	3	3	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	1
3.1.3	3	3	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	1
3.1.4	3	3	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	1
3.2.1	4	3	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	1.33
3.2.2	4	3	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	1.33
3.3.1	3	3	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	1
3.3.2	3	2	Encourage sign up to MEAs and international treaties (where needed).	2
5.1.1	4	3	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	1.33
5.1.2	4	3	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	1.33
5.1.3	4	3	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	1.33
5.1.4	4	3	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	1.33
5.2.1	2	3	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	0.67
5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	3	Organize public events, training s and workshops.	0.67
5.2.4	2	2	Involve farmers and hunters in the conservation activities.	1.33
5.3.1	4	3	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	1.33
5.3.2	4	2	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	2.67
5.3.3	4	3	Produce and promote guidance for good practice and design of the relevant infrastructure.	1.33

5.3.4	4	3	Trainings and workshops (for electricity companies and other relevant stakeholders).	1.33
5.3.5	4	3	Involve electricity companies, investors and authorities in conservation.	1.33

Priority actions

- Collaboration with the energy sector on bird safe design of infrastructure
- Legal response to poisoning.

Kazakhstan

National Implementation Score 1.23

Action	PS	IS	Description	API
1.1.1	3	1	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	3
1.1.2	2	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	2
1.1.3	1	1	Establish specialized toxicology labs with qualified personnel where feasible.	1
1.1.4	1	1	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	1
1.3.1	3	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	3
1.3.2	2	1	Improve the control over pest control measures.	2
1.3.3	2	1	Penalize land owners/managers when poisoning incidents occur on their land.	2
1.3.4	3	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	3
2.1.1	2	1	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	2
2.1.2	2	1	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc).	2
2.2.1	2	1	Establish and train dedicated Wildlife Crime Units in relevant authorities. Ensure shooting patrols at bottleneck sites and hot spots of illegal shooting. Incentivize reporting and successful persecution of violators.	2
2.2.2	2	n/a	Promote alternative hobbies to leisure shooting (e.g. wildlife photography).	n/a
2.3.1	2	3	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	0.67
2.3.2	2	4	Improve the control on fire arms and hunting licenses where necessary.	0
2.3.3	2	2	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	1.33
2.3.4	2	2	Close down illegal animal trades on black markets.	1.33
3.1.1	3	n/a	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	n/a
3.1.2	3	1	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	3
3.1.3	3	1	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	3
3.1.4	3	n/a	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	n/a
3.2.1	4	n/a	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	n/a
3.2.2	4	n/a	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	n/a
3.3.1	3	n/a	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	n/a
3.3.2	3	1	Encourage sign up to MEAs and international treaties (where needed).	3
4.1.1	3	1	Exchange information, common survey methods and protocols.	3
4.1.2	3	3	Map and monitor nests (representative sample where population is large).	1
4.1.3	3	2	Identify population and productivity trends	2
4.1.4	3	2	Develop and publish sensitivity maps for the most important sites and habitats of the species.	2
4.1.5	3	2	Better understand the populations connectivity.	2
4.1.6	3	1	Map (available) predictable/reliable food sources (e.g. dump sites).	3
4.1.7	3	1	Test methods to increase the productivity of wild populations (at least in countries with low productivity, e.g. individual feeding of pairs and nest guarding).	3
4.1.8	3	1	Assess feasibility of reintroduction (where appropriate).	3
4.1.9	3	1	Test potential to improve head-start of juveniles to avoid mortality due to natural barriers.	3
4.1.10	3	n/a	Assess how the migrating individuals use ships in Mediterranean with the aim to assess the potential of using artificial islands in Mediterranean.	n/a
4.2.1	3	1	Create a network of safe zones around the core breeding areas.	3
4.2.2	3	1	Provide intensive conservation care (e.g. nest guarding, supplementary feeding) in breeding territories of core importance and high risk.	3

4.2.3	3	1	Improve the size and quality of foraging habitats available to the breeding pairs through appropriate land management (pastoralism, small scale farming, etc.).	3
4.2.4	3	1	Create and manage networks of supplementary feeding stations in core breeding areas (and along the flyway).	3
4.2.5	3	1	Encourage agri-environmental schemes, habitat management schemes and livestock enhancing policies.	3
4.2.6	3	1	Allow vulture-friendly carcass management use (e.g. disposal of animal waste in nature under safe conditions).	3
4.2.7	3	2	Improve management and guarding of protected areas with Egyptian vulture populations.	2
5.1.1	4	1	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	4
5.1.2	4	1	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	4
5.1.3	4	1	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	4
5.1.4	4	1	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	4
5.2.1	2	1	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting “ i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	2
5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	1	Organize public events, training s and workshops.	2
5.2.4	2	1	Involve farmers and hunters in the conservation activities.	2
5.3.1	4	1	<i>Increase awareness regarding the impacts of electrocution and collisions with infrastructure.</i>	4
5.3.2	4	n/a	<i>Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.</i>	n/a
5.3.3	4	n/a	<i>Produce and promote guidance for good practice and design of the relevant infrastructure.</i>	n/a
5.3.4	4	n/a	<i>Trainings and workshops (for electricity companies and other relevant stakeholders).</i>	n/a
5.3.5	4	1	<i>Involve electricity companies, investors and authorities in conservation.</i>	4

Priority actions

- Mitigating the threat of poisoning
- Energy infrastructure impact assessment.
- Increasing measures to improve the understanding of the status and trends of breeding pairs in core areas

Lebanon

National Implementation Score 2.08

Action	PS	IS	Description	API
1.1.1	3	1	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	3
1.1.2	3	n/a	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	n/a
1.1.3	3	n/a	Establish specialized toxicology labs with qualified personnel where feasible.	n/a
1.1.4	3	n/a	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	n/a
1.3.1	4	n/a	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	n/a
1.3.2	4	n/a	Improve the control over pest control measures.	n/a
1.3.3	4	n/a	Penalize land owners/managers when poisoning incidents occur on their land.	n/a
1.3.4	4	n/a	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	n/a
2.1.1	3	3	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	1
2.1.2	3	3	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc).	1
2.2.1	3	3	Establish and train dedicated Wildlife Crime Units in relevant authorities. Ensure shooting patrols at bottleneck sites and hot spots of illegal shooting. Incentivize reporting and successful persecution of violators.	1
2.2.2	3	2	Promote alternative hobbies to leisure shooting (e.g. wildlife photography).	2
2.3.1	3	2	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	2
2.3.2	3	2	Improve the control on fire arms and hunting licenses where necessary.	2
2.3.3	3	1	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	3
2.3.4	3	3	Close down illegal animal trades on black markets.	1
3.1.1	3	4	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	0
3.1.2	3	1	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	3
3.1.3	3	3	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	1
3.1.4	3	1	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	3
3.2.1	4	1	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	4
3.2.2	4	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	4
3.3.1	3	n/a	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	n/a
3.3.2	3	n/a	Encourage sign up to MEAs and international treaties (where needed).	n/a
5.1.1	4	n/a	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	n/a
5.1.2	4	n/a	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	n/a
5.1.3	4	2	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	2.67
5.1.4	4	n/a	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	n/a
5.2.1	2	3	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	0.67
5.2.2	2	2	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	1.33
5.2.3	2	2	Organize public events, training s and workshops.	1.33
5.2.4	2	3	Involve farmers and hunters in the conservation activities.	0.67
5.3.1	4	2	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	2.67
5.3.2	4	n/a	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	n/a
5.3.3	4	n/a	Produce and promote guidance for good practice and design of the relevant infrastructure.	n/a

5.3.4	4	n/a	Trainings and workshops (for electricity companies and other relevant stakeholders).	n/a
5.3.5	4	n/a	Involve electricity companies, investors and authorities in conservation.	n/a

Priority actions

- Mitigating the threat of IKB
- Energy infrastructure

Niger

National Implementation Score 1.41

Action	PS	IS	Description	API
1.1.1	3	2	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	2
1.1.2	3	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	3
1.1.3	3	n/a	Establish specialized toxicology labs with qualified personnel where feasible.	n/a
1.1.4	3	1	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	3
1.3.1	4	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	4
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	4	1	Penalize land owners/managers when poisoning incidents occur on their land.	4
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.3.1	2	1	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	2
2.3.2	2	n/a	Improve the control on fire arms and hunting licenses where necessary.	n/a
2.3.3	2	3	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	0.67
2.3.4	2	3	Close down illegal animal trades on black markets.	0.67
3.1.1	1	1	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	1
3.1.2	1	2	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	0.67
3.1.3	1	1	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	1
3.1.4	1	1	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	1
3.2.1	1	1	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	1
3.2.2	1	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	1
3.3.1	1	n/a	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	n/a
3.3.2	1	n/a	Encourage sign up to MEAs and international treaties (where needed).	n/a
5.1.1	4	2	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	2.67
5.1.2	4	1	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	4
5.1.3	4	2	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	2.67
5.1.4	4	1	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	4
5.2.1	2	3	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	0.67
5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	3	Organize public events, training s and workshops.	0.67
5.2.4	2	3	Involve farmers and hunters in the conservation activities.	0.67
5.3.1	4	1	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	4
5.3.2	4	1	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	4
5.3.3	4	1	Produce and promote guidance for good practice and design of the relevant infrastructure.	4
5.3.4	4	n/a	Trainings and workshops (for electricity companies and other relevant stakeholders).	n/a
5.3.5	4	1	Involve electricity companies, investors and authorities in conservation.	4

Priority actions

- Mitigating the threat of poisoning and IKB.

Nigeria

National Implementation Score **1.84**

Action	PS	IS	Description	API
1.1.1	3	3	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	1
1.1.2	3	n/a	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	n/a
1.1.3	3	n/a	Establish specialized toxicology labs with qualified personnel where feasible.	n/a
1.1.4	3	n/a	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	n/a
1.3.1	4	2	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	2.67
1.3.2	4	n/a	Improve the control over pest control measures.	n/a
1.3.3	4	n/a	Penalize land owners/managers when poisoning incidents occur on their land.	n/a
1.3.4	4	n/a	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	n/a
2.3.1	2	3	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	0.67
2.3.2	2	n/a	Improve the control on fire arms and hunting licenses where necessary.	n/a
2.3.3	2	3	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	0.67
2.3.4	2	2	Close down illegal animal trades on black markets.	1.33
3.1.1	3	n/a	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	n/a
3.1.2	3	n/a	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	n/a
3.1.3	3	n/a	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	n/a
3.1.4	3	n/a	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	n/a
3.2.1	4	n/a	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	n/a
3.2.2	4	n/a	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	n/a
3.3.1	3	n/a	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	n/a
3.3.2	3	n/a	Encourage sign up to MEAs and international treaties (where needed).	n/a
5.1.1	4	3	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	1.33
5.1.2	4	2	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	2.67
5.1.3	4	2	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	2.67
5.1.4	4	2	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	2.67
5.2.1	2	3	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	0.67
5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	2	Organize public events, training s and workshops.	1.33
5.2.4	2	2	Involve farmers and hunters in the conservation activities.	1.33
5.3.1	4	1	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	4
5.3.2	4	1	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	4
5.3.3	4	1	Produce and promote guidance for good practice and design of the relevant infrastructure.	4
5.3.4	4	1	Trainings and workshops (for electricity companies and other relevant stakeholders).	4
5.3.5	4	1	Involve electricity companies, investors and authorities in conservation.	4

Priority actions

- Raising awareness of the threats of poisoning and dangerous energy infrastructure.

North Macedonia

National Implementation Score 1.93

Action	PS	IS	Description	API
1.1.1	3	3	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	1
1.1.2	3	3	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	1
1.1.3	3	3	Establish specialized toxicology labs with qualified personnel where feasible.	1
1.1.4	3	2	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	2
1.2.1	3	1	Introduce Anti-poison dog patrols in key sites for the species.	3
1.2.2	3	2	Introduce dedicated Wildlife Crime Units in relevant authorities. Incentivize reporting and successful persecution violation.	2
1.2.3	3	2	Increase the use of preventative measures to reduce wildlife conflicts with livestock (e.g. shepherd dogs, fences, etc.). Where appropriate, introduce wildlife damage compensation schemes.	2
1.3.1	4	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	4
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	4	1	Penalize land owners/managers when poisoning incidents occur on their land.	4
1.3.4	4	2	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	2.67
2.1.1	2	2	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	1.33
2.1.2	2	1	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc).	2
3.1.1	3	4	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	0
3.1.2	3	3	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	1
3.1.3	3	2	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	2
3.1.4	3	1	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	3
3.2.1	4	1	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	4
3.2.2	4	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	4
3.3.1	3	1	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	3
3.3.2	3	1	Encourage sign up to MEAs and international treaties (where needed).	3
4.1.1	1	2	Exchange information, common survey methods and protocols.	0.67
4.1.2	1	3	Map and monitor nests (representative sample where population is large).	0.33
4.1.3	1	3	Identify population and productivity trends	0.33
4.1.4	1	3	Develop and publish sensitivity maps for the most important sites and habitats of the species.	0.33
4.1.5	1	2	Better understand the populations connectivity.	0.67
4.1.6	1	3	Map (available) predictable/reliable food sources (e.g. dump sites).	0.33
4.1.7	1	1	Test methods to increase the productivity of wild populations (at least in countries with low productivity, e.g. individual feeding of pairs and nest guarding).	1
4.1.8	1	3	Assess feasibility of reintroduction (where appropriate).	0.33
4.1.9	1	4	Test potential to improve head-start of juveniles to avoid mortality due to natural barriers.	0
4.1.10	1	2	Assess how the migrating individuals use ships in Mediterranean with the aim to assess the potential of using artificial islands in Mediterranean.	0.67
4.2.1	2	3	Create a network of safe zones around the core breeding areas.	0.67
4.2.2	2	3	Provide intensive conservation care (e.g. nest guarding, supplementary feeding) in breeding territories of core importance and high risk.	0.67
4.2.3	2	1	Improve the size and quality of foraging habitats available to the breeding pairs through appropriate land management (pastoralism, small scale farming, etc.).	2
4.2.4	2	2	Create and manage networks of supplementary feeding stations in core breeding areas (and along the flyway).	1.33
4.2.5	2	1	Encourage agri-environmental schemes, habitat management schemes and livestock enhancing policies.	2

4.2.6	2	1	Allow vulture-friendly carcass management use (e.g. disposal of animal waste in nature under safe conditions).	2
4.2.7	2	2	Improve management and guarding of protected areas with Egyptian vulture populations.	1.33
4.3.1	1	1	Adhere to best practice and cooperate within European Endangered Species Programme.	1
4.3.2	1	1	Ensure, in the long term, birds for release programmes.	1
5.1.1	4	3	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	1.33
5.1.2	4	2	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	2.67
5.1.3	4	3	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	1.33
5.1.4	4	3	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	1.33
5.3.1	4	2	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	2.67
5.3.2	4	2	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	2.67
5.3.3	4	1	Produce and promote guidance for good practice and design of the relevant infrastructure.	4
5.3.4	4	2	Trainings and workshops (for electricity companies and other relevant stakeholders).	2.67
5.3.5	4	2	Involve electricity companies, investors and authorities in conservation.	2.67

Priority actions

- Mitigating the threat of poisoning
- Energy infrastructure.

Oman

National Implementation Score 1.44

Action	PS	IS	Description	API
1.1.1	3	2	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	2
1.1.2	3	3	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	1
1.1.3	3	1	Establish specialized toxicology labs with qualified personnel where feasible.	3
1.1.4	3	1	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	3
1.2.1	3	1	Introduce Anti-poison dog patrols in key sites for the species.	3
1.2.2	3	1	Introduce dedicated Wildlife Crime Units in relevant authorities. Incentivize reporting and successful persecution violation.	3
1.2.3	3	1	Increase the use of preventative measures to reduce wildlife conflicts with livestock (e.g. shepherd dogs, fences, etc.). Where appropriate, introduce wildlife damage compensation schemes.	3
1.3.1	4	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	4
1.3.2	4	2	Improve the control over pest control measures.	2.67
1.3.3	4	1	Penalize land owners/managers when poisoning incidents occur on their land.	4
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.1.1	3	1	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	3
2.1.2	3	1	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc.).	3
2.2.1	3	1	Establish and train dedicated Wildlife Crime Units in relevant authorities. Ensure shooting patrols at bottleneck sites and hot spots of illegal shooting. Incentivize reporting and successful persecution of violators.	3
2.2.2	3	2	Promote alternative hobbies to leisure shooting (e.g. wildlife photography).	2
2.3.1	3	2	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	2
2.3.2	3	1	Improve the control on fire arms and hunting licenses where necessary.	3
2.3.3	3	1	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	3
2.3.4	3	1	Close down illegal animal trades on black markets.	3
3.1.1	3	2	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	2
3.1.2	3	2	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	2
3.1.3	3	2	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	2
3.1.4	3	2	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	2
3.2.1	4	1	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	4
3.2.2	4	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	4
3.3.1	3	1	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	3
3.3.2	3	1	Encourage sign up to MEAs and international treaties (where needed).	3
4.1.1	1	3	Exchange information, common survey methods and protocols.	0.33
4.1.2	1	3	Map and monitor nests (representative sample where population is large).	0.33
4.1.3	1	3	Identify population and productivity trends	0.33
4.1.4	1	2	Develop and publish sensitivity maps for the most important sites and habitats of the species.	0.67
4.1.5	1	4	Better understand the populations connectivity.	0
4.1.6	1	3	Map (available) predictable/reliable food sources (e.g. dump sites).	0.33
4.2.1	2	2	Create a network of safe zones around the core breeding areas.	1.33
4.2.4	2	1	Create and manage networks of supplementary feeding stations in core breeding areas (and along the flyway).	2
4.2.6	2	1	Allow vulture-friendly carcass management use (e.g. disposal of animal waste in nature under safe conditions).	2

4.2.7	2	1	Improve management and guarding of protected areas with Egyptian vulture populations.	2
5.1.1	4	1	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	4
5.1.2	4	1	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	4
5.1.3	4	2	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	2.67
5.1.4	4	n/a	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	n/a
5.2.1	2	n/a	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting “i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	n/a
5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	2	Organize public events, training s and workshops.	1.33
5.2.4	2	1	Involve farmers and hunters in the conservation activities.	2
5.3.1	4	2	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	2.67
5.3.2	4	2	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	2.67
5.3.3	4	1	Produce and promote guidance for good practice and design of the relevant infrastructure.	4
5.3.4	4	2	Trainings and workshops (for electricity companies and other relevant stakeholders).	2.67
5.3.5	4	1	Involve electricity companies, investors and authorities in conservation.	4

Priority actions

- Mitigating the threat of poisoning, including NSAIDs
- Energy infrastructure.

Romania

National Implementation Score 1.15

Action	PS	IS	Description	API
1.1.1	3	2	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	2
1.1.2	3	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	3
1.1.3	3	2	Establish specialized toxicology labs with qualified personnel where feasible.	2
1.1.4	3	1	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	3
1.2.1	3	1	Introduce Anti-poison dog patrols in key sites for the species.	3
1.2.2	3	1	Introduce dedicated Wildlife Crime Units in relevant authorities. Incentivize reporting and successful persecution violation.	3
1.2.3	3	1	Increase the use of preventative measures to reduce wildlife conflicts with livestock (e.g. shepherd dogs, fences, etc.). Where appropriate, introduce wildlife damage compensation schemes.	3
1.3.1	4	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	4
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	4	1	Penalize land owners/managers when poisoning incidents occur on their land.	4
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.1.1	2	1	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	2
2.1.2	2	1	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc.).	2
3.1.1	3	1	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	3
3.1.2	3	1	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	3
3.1.3	3	1	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	3
3.1.4	3	2	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	2
3.2.1	4	1	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	4
3.2.2	4	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	4
3.3.1	3	2	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	2
3.3.2	3	1	Encourage sign up to MEAs and international treaties (where needed).	3
4.1.1	1	1	Exchange information, common survey methods and protocols.	1
4.1.2	1	n/a	Map and monitor nests (representative sample where population is large).	n/a
4.1.3	1	n/a	Identify population and productivity trends	n/a
4.1.4	1	1	Develop and publish sensitivity maps for the most important sites and habitats of the species.	1
4.1.5	1	1	Better understand the populations connectivity.	1
4.1.6	1	1	Map (available) predictable/reliable food sources (e.g. dump sites).	1
4.1.7	1	n/a	Test methods to increase the productivity of wild populations (at least in countries with low productivity, e.g. individual feeding of pairs and nest guarding).	n/a
4.1.8	1	1	Assess feasibility of reintroduction (where appropriate).	1
4.1.9	1	n/a	Test potential to improve head-start of juveniles to avoid mortality due to natural barriers.	n/a
4.1.10	1	n/a	Assess how the migrating individuals use ships in Mediterranean with the aim to assess the potential of using artificial islands in Mediterranean.	n/a
4.2.1	2	n/a	Create a network of safe zones around the core breeding areas.	n/a
4.2.2	2	n/a	Provide intensive conservation care (e.g. nest guarding, supplementary feeding) in breeding territories of core importance and high risk.	n/a
4.2.3	2	n/a	Improve the size and quality of foraging habitats available to the breeding pairs through appropriate land management (pastoralism, small scale farming, etc.).	n/a
4.2.4	2	n/a	Create and manage networks of supplementary feeding stations in core breeding areas (and along the flyway).	n/a
4.2.5	2	1	Encourage agri-environmental schemes, habitat management schemes and livestock enhancing policies.	2

4.2.6	2	n/a	Allow vulture-friendly carcass management use (e.g. disposal of animal waste in nature under safe conditions).	n/a
4.2.7	2	n/a	Improve management and guarding of protected areas with Egyptian vulture populations.	n/a
4.3.1	1	n/a	Adhere to best practice and cooperate within European Endangered Species Programme.	n/a
4.3.2	1	n/a	Ensure, in the long term, birds for release programmes.	n/a
5.1.1	4	1	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	4
5.1.2	4	n/a	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	n/a
5.1.3	4	1	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	4
5.1.4	4	1	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	4
5.3.1	4	1	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	4
5.3.2	4	1	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	4
5.3.3	4	1	Produce and promote guidance for good practice and design of the relevant infrastructure.	4
5.3.4	4	1	Trainings and workshops (for electricity companies and other relevant stakeholders).	4
5.3.5	4	2	Involve electricity companies, investors and authorities in conservation.	2.67

Since the commencement of the EVFAP time period it has been confirmed that Egyptian Vultures are no longer breeding in the country and likely haven't been for 30-40 years. Migrants are recorded in the spring and autumn.

Given there is no breeding population there have been no targeted projects to implement the EVFA, although some actions have been progressed through delivery primarily for other species. Stakeholders, however, are engaged in addressing the threats to Egyptian Vulture and other raptor species.

Russia

National Implementation Score 1.18

Action	PS	IS	Description	API
1.1.1	3	1	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	3
1.1.2	3	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	3
1.1.3	3	1	Establish specialized toxicology labs with qualified personnel where feasible.	3
1.1.4	3	1	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	3
1.3.1	3	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	3
1.3.2	3	1	Improve the control over pest control measures.	3
1.3.3	3	1	Penalize land owners/managers when poisoning incidents occur on their land.	3
1.3.4	3	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	3
2.1.1	2	1	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	2
2.1.2	2	1	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc).	2
2.3.1	2	1	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	2
2.3.2	2	1	Improve the control on fire arms and hunting licenses where necessary.	2
2.3.3	2	n/a	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	n/a
2.3.4	2	n/a	Close down illegal animal trades on black markets.	n/a
4.1.1	3	2	Exchange information, common survey methods and protocols.	2
4.1.2	3	2	Map and monitor nests (representative sample where population is large).	2
4.1.3	3	2	Identify population and productivity trends	2
4.1.4	3	2	Develop and publish sensitivity maps for the most important sites and habitats of the species.	2
4.1.5	3	2	Better understand the populations connectivity.	2
4.1.6	3	2	Map (available) predictable/reliable food sources (e.g. dump sites).	2
4.1.7	3	1	Test methods to increase the productivity of wild populations (at least in countries with low productivity, e.g. individual feeding of pairs and nest guarding).	3
4.1.8	3	n/a	Assess feasibility of reintroduction (where appropriate).	n/a
4.1.9	3	n/a	Test potential to improve head-start of juveniles to avoid mortality due to natural barriers.	n/a
4.1.10	3	n/a	Assess how the migrating individuals use ships in Mediterranean with the aim to assess the potential of using artificial islands in Mediterranean.	n/a
4.2.1	3	1	Create a network of safe zones around the core breeding areas.	3
4.2.2	3	1	Provide intensive conservation care (e.g. nest guarding, supplementary feeding) in breeding territories of core importance and high risk.	3
4.2.3	3	1	Improve the size and quality of foraging habitats available to the breeding pairs through appropriate land management (pastoralism, small scale farming, etc.).	3
4.2.4	3	1	Create and manage networks of supplementary feeding stations in core breeding areas (and along the flyway).	3
4.2.5	3	1	Encourage agri-environmental schemes, habitat management schemes and livestock enhancing policies.	3
4.2.6	3	1	Allow vulture-friendly carcass management use (e.g. disposal of animal waste in nature under safe conditions).	3
4.2.7	3	1	Improve management and guarding of protected areas with Egyptian vulture populations.	3
5.1.1	4	1	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	4
5.1.2	4	1	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	4
5.1.3	4	1	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	4
5.1.4	4	1	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	4
5.2.1	2	1	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	2

5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	1	Organize public events, training s and workshops.	2
5.2.4	2	1	Involve farmers and hunters in the conservation activities.	2

Priority actions

- Mitigating the threat of poisoning.
- Increasing measures to improve the understanding and status of breeding pairs.

Saudi Arabia

National Implementation Score 1.57

Action	PS	IS	Description	API
1.1.1	3	3	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	1
1.1.2	3	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	3
1.1.3	3	1	Establish specialized toxicology labs with qualified personnel where feasible.	3
1.1.4	3	1	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	3
1.3.1	4	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	4
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	4	1	Penalize land owners/managers when poisoning incidents occur on their land.	4
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.1.1	3	1	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	3
2.1.2	3	1	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc).	3
2.2.1	3	4	Establish and train dedicated Wildlife Crime Units in relevant authorities. Ensure shooting patrols at bottleneck sites and hot spots of illegal shooting. Incentivize reporting and successful persecution of violators.	0
2.2.2	3	1	Promote alternative hobbies to leisure shooting (e.g. wildlife photography).	3
2.3.1	3	4	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	0
2.3.2	3	4	Improve the control on fire arms and hunting licenses where necessary.	0
2.3.3	3	1	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	3
2.3.4	3	1	Close down illegal animal trades on black markets.	3
3.1.1	3	4	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	0
3.1.2	3	3	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	1
3.1.3	3	3	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	1
3.1.4	3	3	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	1
3.2.1	4	2	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	2.67
3.2.2	4	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	4
3.3.1	3	1	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	3
3.3.2	3	1	Encourage sign up to MEAs and international treaties (where needed).	3
5.1.1	4	1	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	4
5.1.2	4	1	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	4
5.1.3	4	1	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	4
5.1.4	4	1	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	4
5.2.1	2	1	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting, promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	2
5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	2	Organize public events, training s and workshops.	1.33
5.2.4	2	1	Involve farmers and hunters in the conservation activities.	2
5.3.1	4	1	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	4
5.3.2	4	1	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	4
5.3.3	4	1	Produce and promote guidance for good practice and design of the relevant infrastructure.	4

5.3.4	4	1	Trainings and workshops (for electricity companies and other relevant stakeholders).	4
5.3.5	4	2	Involve electricity companies, investors and authorities in conservation.	2.67

Priority actions

- Mitigating the threat of poisoning
- Energy infrastructure.

Serbia

National Implementation Score 1.48

Action	PS	IS	Description	API
1.1.1	3	3	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	1
1.1.2	3	3	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	1
1.1.3	3	2	Establish specialized toxicology labs with qualified personnel where feasible.	2
1.1.4	3	1	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	3
1.2.1	3	1	Introduce Anti-poison dog patrols in key sites for the species.	3
1.2.2	3	2	Introduce dedicated Wildlife Crime Units in relevant authorities. Incentivize reporting and successful persecution violation.	2
1.2.3	3	1	Increase the use of preventative measures to reduce wildlife conflicts with livestock (e.g. shepherd dogs, fences, etc.). Where appropriate, introduce wildlife damage compensation schemes.	3
1.3.1	4	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	4
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	4	1	Penalize land owners/managers when poisoning incidents occur on their land.	4
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.1.1	2	2	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	1.33
2.1.2	2	1	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc.).	2
3.1.1	3	2	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	2
3.1.2	3	1	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	3
3.1.3	3	1	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	3
3.1.4	3	1	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	3
3.2.1	4	1	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	4
3.2.2	4	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	4
3.3.1	3	1	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	3
3.3.2	3	1	Encourage sign up to MEAs and international treaties (where needed).	3
4.1.1	1	2	Exchange information, common survey methods and protocols.	0.67
4.1.2	1	n/a	Map and monitor nests (representative sample where population is large).	n/a
4.1.3	1	n/a	Identify population and productivity trends	n/a
4.1.4	1	n/a	Develop and publish sensitivity maps for the most important sites and habitats of the species.	n/a
4.1.5	1	1	Better understand the populations connectivity.	1
4.1.6	1	1	Map (available) predictable/reliable food sources (e.g. dump sites).	1
4.1.7	1	n/a	Test methods to increase the productivity of wild populations (at least in countries with low productivity, e.g. individual feeding of pairs and nest guarding).	n/a
4.1.8	1	1	Assess feasibility of reintroduction (where appropriate).	1
4.1.9	1	n/a	Test potential to improve head-start of juveniles to avoid mortality due to natural barriers.	n/a
4.1.10	1	n/a	Assess how the migrating individuals use ships in Mediterranean with the aim to assess the potential of using artificial islands in Mediterranean.	n/a
4.2.1	2	n/a	Create a network of safe zones around the core breeding areas.	n/a
4.2.2	2	n/a	Provide intensive conservation care (e.g. nest guarding, supplementary feeding) in breeding territories of core importance and high risk.	n/a
4.2.3	2	n/a	Improve the size and quality of foraging habitats available to the breeding pairs through appropriate land management (pastoralism, small scale farming, etc.).	n/a
4.2.4	2	2	Create and manage networks of supplementary feeding stations in core breeding areas (and along the flyway).	1.33
4.2.5	2	2	Encourage agri-environmental schemes, habitat management schemes and livestock enhancing policies.	1.33

4.2.6	2	1	Allow vulture-friendly carcass management use (e.g. disposal of animal waste in nature under safe conditions).	2
4.2.7	2	1	Improve management and guarding of protected areas with Egyptian vulture populations.	2
4.3.1	1	1	Adhere to best practice and cooperate within European Endangered Species Programme.	1
4.3.2	1	1	Ensure, in the long term, birds for release programmes.	1
5.1.1	4	3	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	1.33
5.1.2	4	1	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	4
5.1.3	4	3	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	1.33
5.3.1	4	2	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	2.67
5.1.4	4	2	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	2.67
5.3.2	4	n/a	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	n/a
5.3.3	4	n/a	Produce and promote guidance for good practice and design of the relevant infrastructure.	n/a
5.3.4	4	1	Trainings and workshops (for electricity companies and other relevant stakeholders).	4
5.3.5	4	1	Involve electricity companies, investors and authorities in conservation.	4

Since the commencement of the EVFAP time period it has been confirmed that Egyptian Vultures are no longer breeding in the country and likely has not since at least 2004. Satellite tagged individuals have been recorded passing through Serbia in recent years as migrants or unsettled subadults.

Given there is no breeding population there have been no targeted projects to implement the EVFA, although some actions have been progressed through delivery primarily for other species. Stakeholders, however, are engaged in addressing the threats to Egyptian Vulture and other raptor species.

Sudan

National Implementation Score 1.44

Action	PS	IS	Description	API
1.1.1	3	1	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	3
1.1.2	3	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	3
1.1.3	3	1	Establish specialized toxicology labs with qualified personnel where feasible.	3
1.1.4	3	1	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	3
1.3.1	4	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	4
1.3.2	4	2	Improve the control over pest control measures.	2.67
1.3.3	4	1	Penalize land owners/managers when poisoning incidents occur on their land.	4
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.1.1	2	1	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	2
2.1.2	2	1	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc).	2
2.3.1	2	2	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	1.33
2.3.2	2	1	Improve the control on firearms and hunting licenses where necessary.	2
2.3.3	2	1	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	2
2.3.4	2	1	Close down illegal animal trades on black markets.	2
3.1.1	3	3	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	1
3.1.2	3	3	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	1
3.1.3	3	2	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	2
3.1.4	3	2	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	2
3.2.1	4	2	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	2.67
3.2.2	4	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	4
3.3.1	3	1	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	3
3.3.2	3	2	Encourage sign up to MEAs and international treaties (where needed).	2
5.1.1	4	1	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	4
5.1.2	4	1	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	4
5.1.3	4	2	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	2.67
5.1.4	4	1	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	4
5.2.1	2	1	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	2
5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	2	Organize public events, training s and workshops.	1.33
5.2.4	2	1	Involve farmers and hunters in the conservation activities.	2
5.3.1	4	2	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	2.67
5.3.2	4	2	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	2.67
5.3.3	4	2	Produce and promote guidance for good practice and design of the relevant infrastructure.	2.67
5.3.4	4	1	Trainings and workshops (for electricity companies and other relevant stakeholders).	4
5.3.5	4	1	Involve electricity companies, investors and authorities in conservation.	4

Priority actions

- Mitigating the threat of poisoning
- Energy infrastructure.

Syria

National Implementation Score 1.81

Action	PS	IS	Description	API
1.1.1	3	1	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	3
1.1.2	3	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	3
1.1.3	3	n/a	Establish specialized toxicology labs with qualified personnel where feasible.	n/a
1.1.4	3	1	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	3
1.2.1	3	n/a	Introduce Anti-poison dog patrols in key sites for the species.	n/a
1.2.2	3	1	Introduce dedicated Wildlife Crime Units in relevant authorities. Incentivize reporting and successful persecution violation.	3
1.2.3	3	1	Increase the use of preventative measures to reduce wildlife conflicts with livestock (e.g. shepherd dogs, fences, etc.). Where appropriate, introduce wildlife damage compensation schemes.	3
1.3.1	4	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	4
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	4	1	Penalize land owners/managers when poisoning incidents occur on their land.	4
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.1.1	3	3	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	1
2.1.2	3	2	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc.).	2
2.2.1	3	2	Establish and train dedicated Wildlife Crime Units in relevant authorities. Ensure shooting patrols at bottleneck sites and hot spots of illegal shooting. Incentivize reporting and successful persecution of violators.	2
2.2.2	3	2	Promote alternative hobbies to leisure shooting (e.g. wildlife photography).	2
2.3.1	3	2	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	2
2.3.2	3	2	Improve the control on firearms and hunting licenses where necessary.	2
2.3.3	3	2	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	2
2.3.4	3	1	Close down illegal animal trades on black markets.	3
3.1.1	3	2	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	2
3.1.2	3	2	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	2
3.1.3	3	3	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	1
3.1.4	3	2	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	2
3.2.1	4	3	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	1.33
3.2.2	4	3	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	1.33
3.3.1	3	3	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	1
3.3.2	3	3	Encourage sign up to MEAs and international treaties (where needed).	1
5.1.1	4	2	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	2.67
5.1.2	4	2	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	2.67
5.1.3	4	1	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	4
5.1.4	4	2	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	2.67
5.2.1	2	2	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	1.33
5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	2	Organize public events, training s and workshops.	1.33

5.2.4	2	2	Involve farmers and hunters in the conservation activities.	1.33
5.3.1	4	2	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	2.67
5.3.2	4	3	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	1.33
5.3.3	4	3	Produce and promote guidance for good practice and design of the relevant infrastructure.	1.33
5.3.4	4	2	Trainings and workshops (for electricity companies and other relevant stakeholders).	2.67
5.3.5	4	1	Involve electricity companies, investors and authorities in conservation.	4

Priority actions

- Mitigating the threat of illegal hunting trade and poisoning.

Turkey

National Implementation Score 1.72

Action	PS	IS	Description	API
1.1.1	3	2	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	2
1.1.2	3	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	3
1.1.3	3	1	Establish specialized toxicology labs with qualified personnel where feasible.	3
1.1.4	3	2	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	2
1.2.1	3	1	Introduce Anti-poison dog patrols in key sites for the species.	3
1.2.2	3	1	Introduce dedicated Wildlife Crime Units in relevant authorities. Incentivize reporting and successful persecution violation.	3
1.2.3	3	2	Increase the use of preventative measures to reduce wildlife conflicts with livestock (e.g. shepherd dogs, fences, etc.). Where appropriate, introduce wildlife damage compensation schemes.	2
1.3.1	4	2	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	2.67
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	4	1	Penalize land owners/managers when poisoning incidents occur on their land.	4
1.3.4	4	2	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	2.67
2.1.1	2	2	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	1.33
2.1.2	2	2	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc.).	1.33
3.1.1	3	4	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	0
3.1.2	3	3	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	1
3.1.3	3	2	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	2
3.1.4	3	2	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	2
3.2.1	4	1	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	4
3.2.2	4	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	4
3.3.1	3	1	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	3
3.3.2	3	1	Encourage sign up to MEAs and international treaties (where needed).	3
4.1.1	1	2	Exchange information, common survey methods and protocols.	0.67
4.1.2	1	2	Map and monitor nests (representative sample where population is large).	0.67
4.1.3	1	2	identify population and productivity trends	0.67
4.1.4	1	2	Develop and publish sensitivity maps for the most important sites and habitats of the species.	0.67
4.1.5	1	2	Better understand the populations connectivity.	0.67
4.1.6	1	3	Map (available) predictable/reliable food sources (e.g. dump sites).	0.33
4.1.7	1	4	Test methods to increase the productivity of wild populations (at least in countries with low productivity, e.g. individual feeding of pairs and nest guarding).	0
4.1.8	1	n/a	Assess feasibility of reintroduction (where appropriate).	n/a
4.1.9	1	1	Test potential to improve head-start of juveniles to avoid mortality due to natural barriers.	1
4.1.10	1	1	Assess how the migrating individuals use ships in Mediterranean with the aim to assess the potential of using artificial islands in Mediterranean.	1
4.2.1	2	2	Create a network of safe zones around the core breeding areas.	1.33
4.2.2	2	2	Provide intensive conservation care (e.g. nest guarding, supplementary feeding) in breeding territories of core importance and high risk.	1.33
4.2.3	2	2	Improve the size and quality of foraging habitats available to the breeding pairs through appropriate land management (pastoralism, small scale farming, etc.).	1.33
4.2.4	2	n/a	Create and manage networks of supplementary feeding stations in core breeding areas (and along the flyway).	n/a
4.2.5	2	3	Encourage agri-environmental schemes, habitat management schemes and livestock enhancing policies.	0.67

4.2.6	2	1	Allow vulture-friendly carcass management use (e.g. disposal of animal waste in nature under safe conditions).	2
4.2.7	2	1	Improve management and guarding of protected areas with Egyptian vulture populations.	2
4.3.1	1	2	Adhere to best practice and cooperate within European Endangered Species Programme.	0.67
4.3.2	1	1	Ensure, in the long term, birds for release programmes.	1
5.1.1	4	2	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	2.67
5.1.2	4	2	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	2.67
5.1.3	4	2	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	2.67
5.1.4	4	2	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	2.67
5.3.1	4	2	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	2.67
5.3.2	4	1	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	4
5.3.3	4	1	Produce and promote guidance for good practice and design of the relevant infrastructure.	4
5.3.4	4	2	Trainings and workshops (for electricity companies and other relevant stakeholders).	2.67
5.3.5	4	2	Involve electricity companies, investors and authorities in conservation.	2.67

Priority actions

- Mitigating the threat of poisoning
- Energy infrastructure.

Turkmenistan

National Implementation Score 1.19

Action	PS	IS	Description	API
1.1.1	1	n/a	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	n/a
1.1.2	1	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	1
1.1.3	1	n/a	Establish specialized toxicology labs with qualified personnel where feasible.	n/a
1.1.4	1	n/a	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	n/a
1.3.1	3	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	3
1.3.2	3	1	Improve the control over pest control measures.	3
1.3.3	2	1	Penalize land owners/managers when poisoning incidents occur on their land.	2
1.3.4	2	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention	2
2.1.1	2	1	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	2
2.1.2	2	1	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc).	2
2.3.1	2	1	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	2
2.3.2	2	3	Improve the control on firearms and hunting licenses where necessary.	0.67
2.3.3	2	n/a	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	n/a
2.3.4	2	n/a	Close down illegal animal trades on black markets.	n/a
4.1.1	3	1	Exchange information, common survey methods and protocols.	3
4.1.2	3	2	Map and monitor nests (representative sample where population is large).	2
4.1.3	3	2	Identify population and productivity trends	2
4.1.4	3	2	Develop and publish sensitivity maps for the most important sites and habitats of the species.	2
4.1.5	3	1	Better understand the populations connectivity.	3
4.1.6	3	1	Map (available) predictable/reliable food sources (e.g. dump sites).	3
4.1.7	3	1	Test methods to increase the productivity of wild populations (at least in countries with low productivity, e.g. individual feeding of pairs and nest guarding).	3
4.1.8	3	n/a	Assess feasibility of reintroduction (where appropriate).	n/a
4.1.9	3	1	Test potential to improve head-start of juveniles to avoid mortality due to natural barriers.	3
4.1.10	3	n/a	Assess how the migrating individuals use ships in Mediterranean with the aim to assess the potential of using artificial islands in Mediterranean.	n/a
4.2.1	3	1	Create a network of safe zones around the core breeding areas.	3
4.2.2	3	1	Provide intensive conservation care (e.g. nest guarding, supplementary feeding) in breeding territories of core importance and high risk.	3
4.2.3	3	1	Improve the size and quality of foraging habitats available to the breeding pairs through appropriate land management (pastoralism, small scale farming, etc.).	3
4.2.4	3	1	Create and manage networks of supplementary feeding stations in core breeding areas (and along the flyway).	3
4.2.5	3	1	Encourage agri-environmental schemes, habitat management schemes and livestock enhancing policies.	3
4.2.6	3	1	Allow vulture-friendly carcass management use (e.g. disposal of animal waste in nature under safe conditions).	3
4.2.7	3	2	Improve management and guarding of protected areas with Egyptian vulture populations.	2
5.1.1	4	1	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	4
5.1.2	4	1	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	4
5.1.3	4	1	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	4
5.2.1	2	1	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	2
5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	1	Organize public events, training s and workshops.	2

5.2.4	2	1	Involve farmers and hunters in the conservation activities.	2
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Priority actions

- Mitigating the threat of poisoning.
- Increasing measures to improve the understanding and status of breeding pairs.

Trevor Poyser Species Conservation Fund issued the grant for the project "Raptors in the mountains and deserts of Turkmenistan". Operating February 2022 to June 2023, one of the goals is to update the *Neophron percnopterus* Turkmenistan Action Plan.

Lack of funding has been identified as potential issue in delivery of actions in the remaining 5 years of EVFAP.

United Arab Emirates

National Implementation Score 1.29

Action	PS	IS	Description	API
1.1.1	3	2	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	2
1.1.2	3	1	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	3
1.1.3	3	n/a	Establish specialized toxicology labs with qualified personnel where feasible.	n/a
1.1.4	3	1	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	3
1.3.1	4	1	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	4
1.3.2	4	1	Improve the control over pest control measures.	4
1.3.3	4	n/a	Penalize land owners/managers when poisoning incidents occur on their land.	n/a
1.3.4	4	1	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	4
2.1.1	3	2	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	2
2.1.2	3	1	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc).	3
2.2.1	3	1	Establish and train dedicated Wildlife Crime Units in relevant authorities. Ensure shooting patrols at bottleneck sites and hot spots of illegal shooting. Incentivize reporting and successful persecution of violators.	3
2.2.2	3	1	Promote alternative hobbies to leisure shooting (e.g. wildlife photography).	3
2.3.1	3	2	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	2
2.3.2	3	n/a	Improve the control on fire arms and hunting licenses where necessary.	n/a
2.3.3	3	2	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	2
2.3.4	3	2	Close down illegal animal trades on black markets.	2
3.1.1	3	1	Adopt common survey methods and protocols for monitoring electrocution and collision with power infrastructure. Organize regular exchange of knowhow and information among utility companies.	3
3.1.2	3	1	Collect and analyse evidence on mortality due to electrocution and collisions (incl. online database, pre- and post- implementation assessments) and publish results.	3
3.1.3	3	1	Identify migration bottleneck and congregation sites. Produce sensitivity maps for wind farm and powerline siting: map, assess and prioritize the powerlines and wind farms for electrocution and collision risks.	3
3.1.4	3	1	Identify appropriate mitigation measures (incl. explore new approaches) to reduce collision and electrocution risk of birds with energy infrastructure and monitor their effect.	3
3.2.1	4	1	Replace/retrofit dangerous infrastructure as appropriate (underground, insulation, diverters, etc.).	4
3.2.2	4	1	Adapt siting and design of new energy infrastructure at planning stage to take into account sensitivity maps (incl. apply new approaches to reduce collision and electrocution risk).	4
3.3.1	3	2	Improve control of EIA and SEA procedures and the quality of mitigation measures (where necessary).	2
3.3.2	3	3	Encourage sign up to MEAs and international treaties (where needed).	1
5.1.1	4	n/a	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	n/a
5.1.2	4	n/a	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	n/a
5.1.3	4	n/a	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	n/a
5.1.4	4	n/a	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	n/a
5.2.1	2	2	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	1.33
5.2.2	2	n/a	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	n/a
5.2.3	2	n/a	Organize public events, trainings and workshops.	n/a
5.2.4	2	n/a	Involve farmers and hunters in the conservation activities.	n/a
5.3.1	4	1	Increase awareness regarding the impacts of electrocution and collisions with infrastructure.	4
5.3.2	4	1	Seek and promote collaboration with engineers and technical companies to develop improved design of infrastructure.	4
5.3.3	4	1	Produce and promote guidance for good practice and design of the relevant infrastructure.	4

5.3.4	4	1	Trainings and workshops (for electricity companies and other relevant stakeholders).	4
5.3.5	4	1	Involve electricity companies, investors and authorities in conservation.	4

Priority actions

- Mitigating the threat of poisoning
- Reducing IKB
- Energy infrastructure.

Uzbekistan

National Implementation Score 1.28

Action	PS	IS	Description	API
1.1.1	1	n/a	Adapt common survey methods and protocols, enhance exchange of information and know-how, and increase capabilities for monitoring. Investigate the motives for illegal poison use.	n/a
1.1.2	1	n/a	Establish a centralized database to store systematic data on mortality, poison use and toxicology analyses	n/a
1.1.3	1	n/a	Establish specialized toxicology labs with qualified personnel where feasible.	n/a
1.1.4	1	n/a	Study the effect of NSAIDs and lead poisoning on health status and population productivity.	n/a
1.3.1	1	n/a	Strengthen the control of agro-chemicals on the market (nationally) and at the individual farms (locally). Introduce amnesty for handling over illegal pesticides in stock.	n/a
1.3.2	1	n/a	Improve the control over pest control measures.	n/a
1.3.3	1	n/a	Penalize land owners/managers when poisoning incidents occur on their land.	n/a
1.3.4	1	n/a	Strengthen legal control over the use of poisonous substances in line with the CMS Resolution 11.15 and Bern Convention.	n/a
2.1.1	2	1	Improve survey methods and protocols for monitoring illegal killing. Maintain adequate records and exchange information.	2
2.1.2	2	1	Improve understanding of motivation of illegal shooters in order to develop adequate response actions (e.g. awareness raising, stakeholder engagement, etc).	2
2.3.1	2	2	Strengthen the legal protection of the species (where necessary reinforce penalties), including through designation of new protected areas.	1.33
2.3.2	2	n/a	Improve the control on firearms and hunting licenses where necessary.	n/a
2.3.3	2	n/a	Improve border controls and CITES regulations enforcement to prevent trade of specimens.	n/a
2.3.4	2	n/a	Close down illegal animal trades on black markets.	n/a
4.1.1	3	2	Exchange information, common survey methods and protocols.	2
4.1.2	3	2	Map and monitor nests (representative sample where population is large).	2
4.1.3	3	2	Identify population and productivity trends	2
4.1.4	3	1	Develop and publish sensitivity maps for the most important sites and habitats of the species.	3
4.1.5	3	1	Better understand the populations connectivity.	3
4.1.6	3	1	Map (available) predictable/reliable food sources (e.g. dump sites).	3
4.1.7	3	1	Test methods to increase the productivity of wild populations (at least in countries with low productivity, e.g. individual feeding of pairs and nest guarding).	3
4.1.8	3	n/a	Assess feasibility of reintroduction (where appropriate).	n/a
4.1.9	3	1	Test potential to improve head-start of juveniles to avoid mortality due to natural barriers.	3
4.1.10	3	n/a	Assess how the migrating individuals use ships in Mediterranean with the aim to assess the potential of using artificial islands in Mediterranean.	n/a
4.2.1	3	1	Create a network of safe zones around the core breeding areas.	3
4.2.2	3	1	Provide intensive conservation care (e.g. nest guarding, supplementary feeding) in breeding territories of core importance and high risk.	3
4.2.3	3	1	Improve the size and quality of foraging habitats available to the breeding pairs through appropriate land management (pastoralism, small scale farming, etc.).	3
4.2.4	3	1	Create and manage networks of supplementary feeding stations in core breeding areas (and along the flyway).	3
4.2.5	3	n/a	Encourage agri-environmental schemes, habitat management schemes and livestock enhancing policies.	n/a
4.2.6	3	1	Allow vulture-friendly carcass management use (e.g. disposal of animal waste in nature under safe conditions).	3
4.2.7	3	3	Improve management and guarding of protected areas with Egyptian vulture populations.	1
5.1.1	4	n/a	Implement awareness campaign on the legal regime and effects of use of poison baits, improper and inappropriate use of dangerous substances, the use of lead ammunition.	n/a
5.1.2	4	n/a	Develop alternative vulture friendly methods for crop and livestock protection (e.g. appropriate local predator control methods, pest control measures, improved veterinary care etc.).	n/a
5.1.3	4	1	Organise trainings and workshops for stakeholders (vets, farmers, hunters and authorities)	4
5.1.4	0	n/a	Increase stakeholders involvement in conservation and promote the establishment of local anti-poison networks in hotspot areas.	n/a
5.2.1	2	1	Increase awareness of local communities regarding the protected status of the species and the negative effect of illegal shooting i.e. promote vultures as natural sanitary service and best practices to mitigate the illegal killing (local events, media, printed materials, etc.).	2

5.2.2	2	1	Develop alternative livelihoods to encourage local communities to value the species (e.g. develop ecotourism to create jobs).	2
5.2.3	2	1	Organize public events, training s and workshops.	2
5.2.4	2	1	Involve farmers and hunters in the conservation activities.	2

Priority actions

- Increasing measures to improve the understanding of the status trends of breeding pairs and congregation sites.
- Threat monitoring assessments
- Work with authorities and local communities on poisoning and NSAIDs