

International Workshop on “Implementing Wildlife-Friendly Measures in Infrastructure Planning and Design in Mongolia”

Ulaanbaatar, Mongolia, 25th – 28th August 2015

Ulaanbaatar Action Plan on wildlife-friendly infrastructure

PREAMBLE:

Representatives of the Governments of Mongolia and Germany, UN agencies, lenders, private sector, non-governmental organizations and academia came together to:

1. Assess the status of implementation of laws and policies related to wildlife-friendly infrastructure in Mongolia, and propose amendments to the relevant laws and policies with the purpose of clarification and ensuring compliance;
2. Review and evaluate the implementation of the Vilm Declaration of Intent¹;
3. Illustrate best-practice for wildlife-friendly infrastructure, from Strategic Environmental Assessments (SEA) and Environmental Impact Assessments (EIA) to appropriate design and post-construction monitoring;
4. Identify remaining gaps, priorities, follow-up activities and critical stakeholders for strengthening the implementation of the national wildlife-crossing standards and international guidelines;
5. Strengthen awareness and collaboration between stakeholders especially relevant government agencies, mining and construction companies, EIA/SEA practitioners, lenders, and scientists;
6. Elaborate recommendations to ensure the implementation of wildlife-friendly measures for new as well as for existing infrastructure (i.e. Trans-Mongolian Railway);
7. Identify follow-up activities to support the implementation of the above-mentioned policies and laws.

¹ Attached as Annex II

The participants of the meeting

Acknowledge the importance of Central Asia, and in particular Mongolia, as a hotspot for many migratory and highly mobile species. Survival of these species depends on access to food and water resources distributed over large spatial scales noting that these resources are often seasonally and annually unpredictable in their availability and quality;

Recognize that migratory species create and support essential ecosystem services which include fertilization, soil improvement and food provision for predators, and that such species are integral to the value of the vast landscapes through which they migrate, as well as providing cultural and economic value through *inter alia* tourism and sustainable use;

Note the commitments of the Mongolian Government to conserve CMS-listed ungulate species, including the Mongolian gazelle (*Procapra gutturosa*), Asiatic wild ass (*Equus hemionus*) Argali sheep (*Ovis ammon*); Goitered Gazelle (*Gazella subgutturosa*) and Mongolian Saiga Antelope (*Saiga tatarica mongolica*);

Recognize the rapid pace of growth in exploration and extraction activities conducted by the mining industry in Mongolia and with it the development of associated infrastructure in Mongolia and across the Central Asian region in recent years;

Take note of the increasing problem of obstacles to wildlife movements, including existing plans for mining and infrastructure development in Mongolia, and the need for careful mitigation, planning and impact assessments of proposed infrastructure developments to ensure that habitat permeability is maintained within ecosystems and between ecological networks;

Note that many of the species concerned are listed on the Appendices of CMS and under the CMS Central Asian Mammals Initiative (CAMI)², and that CMS Parties adopted at COP11 the “Guidelines for Addressing the Impact of Linear Infrastructure on Large Migratory Mammals in Central Asia” through Resolution 11.24, as well as Resolution 11.25 “Advancing Ecological Networks to Address the Needs of Migratory Species”;

Acknowledge the progress that Mongolia has made in addressing the impacts of infrastructure development on migratory and highly mobile species, and the adoption by the Mongolian Government of national wildlife crossing standards to mitigate these impacts;

Recall the bilateral agreement between Germany and Mongolia of 13 October 2011 regarding the extraction of minerals and other natural resources, noting the need for collaboration to ensure that associated linear infrastructure is designed in such a way to allow the free passage of migratory species and to minimize any other negative impacts on migratory wildlife;

² Attached as Annex I to this Action Plan

HEREBY

Declare their intent to implement the following recommendations, discussed at the international workshop “Implementing wildlife-friendly measures in infrastructure planning and design in Mongolia”, by aiming

Policy

1. To strengthen the existing inter-ministerial working group in Mongolia, *inter alia* involving mid-level officials to ensure continuity of implementation and involve other relevant ministries (e.g. Ministry of Finance, Ministry of Construction and Urban Development); as well as experts and other relevant stakeholders;
2. To suggest to the working group to identify and resolve contradictory policies regulating infrastructure;
3. To nominate from relevant ministries and stakeholders (e.g. lenders, academia, private sector) appropriate individuals responsible for implementation of the Vilm Declaration of Intent and this Ulaanbaatar Action Plan on wildlife-friendly infrastructure;
4. To integrate existing international and national guidelines into the policies of regional cooperation organizations, including CAREC, AIIB, ADB³;
5. To further improve science-policy interaction to foster on-the-ground implementation of transport infrastructure mitigation measures for migratory and highly mobile wildlife;
6. To facilitate an exchange of expertise within the international railroad industry with experience in operating in habitats which feature open range conditions with large highly mobile wildlife species;
7. To establish an “*Environmental Mitigation Fund*” to implement mitigation measures for existing and newly constructed infrastructure, research and monitoring financed by contributions from private sector^[1] and the government;
8. To ensure coordinated large-scale pre-construction, construction and post-construction monitoring of the impacts of infrastructure and development projects on migratory and other highly mobile mammal species;
9. To ensure implementation of the national wildlife crossing standards and other relevant national and international⁴ policies by all relevant stakeholders, including governmental institutions, private sector, lenders, using adaptive management principles, in order to guide mitigation measures;
10. To engage local communities and relevant NGOs to ensure their participation in the discussion on the design of the Trans-Mongolian Railway (TMR) railroad corridor (i.e. fence re-design, and/or partial removal or other possible mitigation measures for improving connectivity for wildlife across the TMR);
11. To strengthen implementation of the existing legal provisions, including spatial planning, EIA and SEA, ensuring that these are applied without exception;

³ CAREC – Central Asia Regional Economic Corridor; ADB - Asian Development Bank; AIIB - Asian Infrastructure Investment Bank.

^[1] Including extractive and construction industries.

⁴ E.g. CMS Infrastructure Guidelines

http://www.cms.int/sites/default/files/publication/%D0%A1MS_Guidelines_Linear_Infrastructure_Central_Asi_an_Mammals.pdf

12. To improve the capacity to turn policy into practice by strengthening education standards in the policy curriculum;
13. To improve the different institutional databases and documentation of previous conservation efforts and ensure the existence of a repository of current processes that are relevant for the conservation of migratory and highly mobile species;
14. To apply the same policy measures for all projects and ensure equal treatment;
15. To increase public awareness of existing policies that affect migratory and highly mobile species.
16. To engage bordering countries to discuss wildlife-friendly re-design of border fences;

Science

17. To identify priorities for monitoring migratory species to ensure that conservation and management measures are effective;
18. To apply the newly established “*Environmental Mitigation Fund*”, as well as other financial means, to support long-term country-wide monitoring of migratory ungulates;
19. To harmonize data collection and analysis to improve comparability and quality of monitoring data to better assess the effectiveness of mitigation and off-set measures;
20. To improve existing models on how to best implement conservation planning for long-distance animal migrations in unpredictable environments;
21. To conduct cost-benefit analyses and examine what legal framework is required to mandate and support fence re-design and removal along the TMR and fence-free policies along other rail routes;

Pre-construction

22. To ensure the integrity, connectivity, and permeability of landscapes used by CMS-listed species taking into consideration existing knowledge of the impacts of linear infrastructure development with different standards for different landscapes;
23. To provide supporting expertise for updating existing policy on railway fencing to meet international standards for wildlife-friendly infrastructure;

During construction

24. To take measures to ensure the design, including shape and dimensions, location, and installation of wildlife crossings meet the standards for wildlife crossings applicable under Mongolian and international law, including CMS, during construction activities of road and railroad projects.

Post-construction

25. To implement a pilot fence removal study along selected segments of the TMR which are likely crossing points for khulan, as well as, for other migratory and/or highly mobile ungulates; and to implement a pilot fence redesign/modification⁵ study along selected segments of the TMR which are believed to be likely crossing points for Mongolian gazelles and other wild animals⁶;
26. To design and implement wildlife movement and distribution surveys for the purpose of identifying suitable wildlife crossing locations for migratory and/or highly mobile ungulates in mountain and forest ecosystems of Mongolia;
27. To increase engagement of international expertise in development and design of standards for wildlife crossings, including along the road between Khanbogd soum and Gashuun Sukhait border crossing or the road from Shiveekhuren, Nariin Sukhait to Tavan Tolgoi mining complex.

⁵ Redesigned or modified as to fit CMS Infrastructure Guidelines for wildlife friendly fencing and adhering to recommendations by Olson, 2011 "Wildlife Crossing Options along Existing and Planned Railroad Infrastructure in Mongolia (World Bank Report).

⁶ Based on the results of the fence removal and modification pilot studies, initiate removal and modification of the TMR corridor fence along the entire region where the TMR overlaps with the range of migratory and/or highly mobile open plains ungulates.

Annex I

The CMS Central Asian Mammals Initiative (CAMI)



CONVENTION ON MIGRATORY SPECIES

Distribution: General

UNEP/CMS/Resolution 11.24

Original: English

THE CENTRAL ASIAN MAMMALS INITIATIVE

Adopted by the Conference of the Parties at its 11th Meeting (Quito, 4-9 November 2014)

Deeply concerned that large mammal migrations in one of the last remaining regions supporting long-distance movements, the Central Asian plains and mountains, are severely threatened by overexploitation of wildlife as well as exploitation of minerals and other natural resources and that the habitats upon which large mammals depend are becoming lost, degraded and fragmented at an unprecedented rate;

Recognizing that extractive industries, infrastructure and fences can have a particularly detrimental impact on the conservation status of migratory mammals and may cause direct mortality and fragmentation of habitats, disrupting essential movement from one place to another and *further recognizing* the urgent need for practical guidelines to mitigate impacts on migratory mammals from linear infrastructure, including the threat from increased human habitation and associated poaching threats along infrastructure routes, not only in Central Asia, but across the wider Asian region;

Aware that long-distance movements of many species are unpredictable, which increases the need to maintain the permeability of large landscapes;

Aware that migratory species and their habitats provide essential ecosystem services as well as cultural heritage value and economic benefits for instance through sustainable use and tourism, and that many human communities directly and indirectly rely on the availability of large mammal species and on intact ecosystems for their livelihoods;

Acknowledging the Central Eurasian Aridland Mammals Concerted Action established by Recommendations 8.23 and 9.1, which highlights the exceptional importance of Eurasian arid ecosystems for migratory species and the crucial role of CMS in conserving them, covering in particular five large mammal species listed on Appendix I (four of these

designated for Concerted Action)¹, and a further six on Appendix II (four of these designated for Cooperative Action)²;

Further acknowledging the multiple mandates of CMS to work in the region, including Memoranda of Understanding covering the Saiga Antelope and Bukhara Deer;

Noting that most of the species in the Central Asian region listed in the Appendices of CMS are also included in the Appendices of the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES), thus offering opportunities for synergy as envisaged in the Memorandum of Understanding and Joint Work Programme between the Secretariats of the two Conventions;

Noting with satisfaction the progress made since COP10 in implementing these mandates, in particular the International Single Species Action Plan for the Conservation of the Argali *Ovis ammon* (CMS/UNEP/COP11/Doc.23.3.3), the assessment of gaps and needs in relation to migratory mammals in Central Asia (CMS/UNEP/COP11/Inf.21) and the Programme of Work for a broader Central Asian mammals initiative comprising all activities aimed at conserving large migratory mammals and implementing CMS in the Central Asian region;

Recalling the decisions under the Future Shape process, including activities 8 and 15 under Res.10.9 urging Parties to “identify opportunities for cooperation and coordination at the local and regional level through the creation of synergies based on geography”, and “to seek opportunities to develop synergistic relationships either based on geography or species clustering”, such as with the development of a common conservation programme;

Taking into account the Bishkek Declaration on the Conservation of Snow Leopards and the comprehensive, long-term Global Snow Leopard and Ecosystem Protection Programme adopted by Range States at the Global Snow Leopard Forum in Bishkek, Kyrgyz Republic in October 2013, which called upon all Range States to declare the year of 2015 as the International Year of the Snow Leopard, and October 23 as an annually celebrated Snow Leopard Day;

Grateful for the financial and in-kind support from the Governments of Switzerland and Germany and the European Union through the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) in pursuing the work for the conservation of migratory mammals in the Central Asian region; and

Further grateful to the Kyrgyz Government for hosting the Stakeholder Meeting on the Conservation of Large Mammals in Central Asia on 23-25 September 2014 in Bishkek,

¹ Appendix I - Bukhara/Yarkand deer *Cervus elaphus yarkandensis* (listed on both Appendices, not designated for Concerted Action), Wild camel *Camelus bactrianus*, Wild yak *Bos grunniens*, Cheetah *Acinonyx jubatus*, Snow leopard *Uncia uncia*.

² Appendix II - Saiga antelope *Saiga spp.*, Kiang *Equus kiang*, Argali *Ovis ammon*, Mongolian gazelle *Procapra gutturosa*, Goitered gazelle *Gazella subgutturosa*, Kulan *Equus hemionus* (the last four designated for Cooperative Action).

which developed the Programme of Work for the Central Asian Mammals Initiative, annexed to the present Resolution;

The Conference of the Parties to the

Convention on the Conservation of Migratory Species of Wild Animals

1. *Adopts* the Programme of Work for the Central Asian Mammals Initiative contained in the Annex to this Resolution and *endorses* the concept of the *Central Asian Mammals Initiative (CAMI)* as an innovative and integrative approach building on a regional programme, that identifies synergies based on common or shared work programmes, geography, species and interests in line with Future Shape decisions, to enhance cooperation and coordination at the local, regional and international level, to minimize institutional overlap and to improve efficient implementation of CMS and its instruments on large mammals in the region;
2. *Further adopts* the Guidelines for Addressing the Impact of Linear Infrastructure on Large Migratory Mammals in Central Asia contained in UNEP/CMS/COP11/Doc.23.3.2;
3. *Also adopts* the International Single Species Action Plan for the Conservation of the Argali *Ovis ammon* contained in UNEP/CMS/COP11/Doc.23.3.3;
4. *Instructs* the Secretariat, subject to funding, to take up the role of coordinating the implementation of the Programme of Work and to establish a post for an officer within the CMS Secretariat to coordinate the CAMI, including to support the implementation of relevant MOUs, Single Species Action Plans such as for the Argali and other CMS mandates;
5. *Requests* Parties and *invites* all Range States, partner organizations, donors and the private sector to engage in the CAMI and to provide the financial or in-kind resources to support its coordination and full and timely implementation;
6. *Calls upon* Range States to strengthen their transboundary cooperation, *inter alia* by using existing international and regional fora; and
7. *Instructs* the Scientific Council and the Secretariat to continue and strengthen efforts to collaborate with other relevant international fora with a view to strengthening synergies and implementation of CMS and the CAMI in these fora.

Annex to Resolution 11.24

PROGRAMME OF WORK

FOR THE CENTRAL ASIAN MAMMALS INITIATIVE (2014-2020)

I. Introduction

The vast and still largely interconnected ecosystems of the Central Asian region harbour a number of CMS-listed large mammal species, most of which are in decline due to poaching, illegal trade, habitat loss, degradation and fragmentation from mining and infrastructure development as well as from overgrazing by and competition with livestock and conversion to agriculture. CMS Parties recognized with Recommendations 8.23 and 9.1 that the populations of many Eurasian migratory mammals¹ are in a profoundly unsatisfactory state of conservation and that these ecosystems and their unique migration phenomena are a crucial area of action for the Convention. CMS is already working together with many Central Asian countries and organizations, inter alia through the Memoranda of Understanding (MoUs) for the conservation of the Saiga antelope and the Bukhara deer and the Single Species Action Plan for the Conservation of Argali. CMS policies also target the removal of barriers to migration and the building of transboundary ecological networks (Res.10.3).

The Central Asian Mammals Initiative (CAMI) has been developed under CMS to provide a common strategic framework for action at the international level to conserve migratory mammals and their habitat in the region. It aims at bringing together and harmonizing implementation of existing CMS instruments and mandates as well as initiatives undertaken by other stakeholders. A strong focus of CAMI is on promoting synergies between stakeholders and existing conservation frameworks, as well as on sharing communication and strengthening cooperation across borders, facilitating building on successes and raising awareness.

The initiative has so far produced the following:

1. An assessment of gaps and needs of migratory mammal conservation in Central Asia (Karlstetter & Mallon 2014), which included a stakeholder survey, online questionnaire and interviews in Afghanistan, China, the Islamic Republic of Iran, Kazakhstan, Kyrgyzstan, Mongolia, the Russian Federation, Tajikistan, Turkmenistan and Uzbekistan in February and March 2014, and national consultation meetings in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan in May and June 2014 (the assessment is available as UNEP/CMS/COP11/Inf.21).
2. Based on the results of this assessment, the following outputs have been produced:

¹ A "migratory species" under CMS means "the entire population or any geographically separate part of the population of any species or lower taxon of wild animals, a significant proportion of whose members cyclically and predictably cross one or more national jurisdictional boundaries." (CMS 1979).

- a. A compilation of key actions that stakeholders identified as important for the conservation of migratory mammals across the region; and
- b. A draft joint Programme of Work (POW) for the CAMI, which was developed during the Stakeholder Meeting on the Conservation of Large Mammals in Central Asia, Bishkek, Kyrgyzstan (23-25 September 2014).

II. Taxonomic and geographical scope

The CAMI currently addresses 15 species, selected based on the following criteria²:

1. Listing on the Appendices of CMS:

Appendix 1: Bukhara/Yarkand deer *Cervus elaphus yarkandensis* (also listed on Appendix II), wild camel *Camelus bactrianus*, wild yak *Bos grunniens*, snow leopard *Uncia uncia*, cheetah *Acinonyx jubatus*

Appendix 2: Saiga *Saiga tatarica* and *S. borealis mongolica*, argali *Ovis ammon*, Mongolian gazelle *Procapra gutturosa*, goitered gazelle *Gazella subgutturosa*, kulan *Equus hemionus*, kiang *Equus kiang*

2. Other long-distance migrants of Central Asia not listed under CMS: chiru *Pantholops hodgsonii*.
3. Species that have transboundary populations (today or possibly in future) and have more or less the same range as species listed above: Przewalski's horse *Equus caballus przewalskii*, Tibetan gazelle *Procapra picticaudata*.
4. The chinkara (jbeber gazelle) *Gazella bennettii* was formally added during the Regional Stakeholder Meeting in Bishkek (23-25 September 2014).

In the Central Asian region these 15 species occur in the following 14 Range States:

Afghanistan, Bhutan, China, India, the Islamic Republic of Iran, Kazakhstan, Kyrgyzstan, Mongolia, Nepal, Pakistan, the Russian Federation, Tajikistan, Turkmenistan and Uzbekistan.

III. Vision, Goal and Objectives of the POW

Following the recommendations from the assessment mentioned above, the POW has the following Vision, Goal and Objectives:

Vision:

Secured and viable populations of migratory mammals that range across the landscapes of Central Asia in healthy ecosystems, are valued by, and bring benefits to, local communities and all stakeholders.

² The standard taxonomic reference for mammals under CMS is Wilson & Reeder (2005).

Goal:

To improve the conservation of migratory large mammals and their habitats in the Central Asian region by strengthening coordination and cross-border cooperation.

Objectives:

1. To address main threats and issues currently not (sufficiently) covered by existing work programmes and stakeholders.
2. To guide planning and implementation of prioritized conservation actions on a regional scale.
3. To facilitate knowledge exchange, communication and the promotion of synergies.
4. To support implementation, coordination and resourcing of the CAMI.

IV. Structure of a draft POW

The draft POW (Table 1) is structured around the Goal and Objectives. The main issues identified under each Objective have been developed based on the outcomes of the assessment process. Activities, and to some extent the respective responsibilities and priorities, were identified during the Stakeholder Meeting on the Conservation of Large Mammals in Central Asia, Bishkek, Kyrgyzstan (23-25 September 2014).

The POW covers the period of 2014 to 2020 in line with the triennial cycle of the CMS Conference of the Parties. A revision of the assessment of gaps and needs of migratory mammal conservation in Central Asia and the POW should be undertaken in 2020.

Table 1: Programme of Work

Vision:			
Secure and viable populations of migratory mammals that range across the landscapes of Central Asia in healthy ecosystems, are valued by, and bring benefits to, local communities and all stakeholders.			
Goal:			
To improve the conservation of migratory large mammals and their habitats in the Central Asian region by strengthening coordination and cross-border cooperation.			
Objective 1. To address key threats and issues currently not (sufficiently) covered by existing work programmes and stakeholders.			
Issue	Activity	Responsible	Priority
1.1. Illegal hunting and trade	1.1.1. Strengthen the capacity of rangers and other relevant enforcement personnel to counteract illegal hunting and trade and secure necessary funding (i.e. human resources, equipment, training).	Government agencies, NGOs	High
	1.1.2. Promote review of national legislation - and its enforcement - on hunting and trade (including relevant penalties, the simplification of prosecution, enforce bonus payment systems to create adequate incentives for enforcement personnel and reinvest fines in conservation) as well as compliance with CITES (and ratification of CITES by those States who are not a party yet).	Government agencies	High
	1.1.3. Promote regular and sound monitoring of species in order to guide, where applicable, sustainable and coordinate off-take of huntable species.	Government agencies, Scientific institutions, NGOs	High
	1.1.4. Improve inter-agency communication and cooperation (i.e. multi-agency task forces) at the national and regional level concerning scientific, management and	Government agencies,	High/medium

	enforcement issues (e.g. through the development of a Wildlife Enforcement Network and greater cooperation with customs).	Scientific institutions	
	1.1.5. Promote the use of new technologies, methods and tools for enforcement (use of SMART, sniffer dogs, risk assessments).	Government agencies, NGOs	High/medium
	1.1.6. Promote information exchange across range, transit and consumer states to counteract illegal hunting and trade and ensure adequate information is available on trophy hunting regulations.	Government agencies, NGOs, TRAFFIC (tbc), CITES (tbc)	High/medium
	1.1.7. Assess feasibility of trophy hunting for huntable species covered under CAMI across the Central Asian region, looking at accruing benefits for local communities, as well as relevant legislation.	Government agencies, NGOs	Medium
	1.1.8. Secure public support for addressing illegal hunting and trade through outreach and development of “citizen/informant networks”.	Government agencies, NGOs	Medium
	1.1.9. Explore other sustainable wildlife use options (i.e. subsistence hunting, ‘green hunting’ - photography) that create incentives for conservation and review according legislation.	Government agencies, NGOs	Medium
	1.1.10. Rotate hunting areas to avoid over-use of animals in one area.	Government agencies, NGOs	Medium
1.2. Overgrazing and livestock competition	1.2.1 Develop methodology for research and monitoring based on examples of best practice on a) pasture productivity, b) pasture suitability, and c) disease transmission.	Government agencies, Scientific Institutions, NGOs	High
	1.2.2. Review and modify existing grazing norms (both legal and customary) based on	Government agencies, Scientific Institutions,	Medium

	e.g. carrying capacity and wildlife habitat hotspots.	INGO's	
	1.2.3. Improve livestock breeding programmes to address overstocking of pastures (focusing on breeds promoting e.g. herd health, productivity and product diversity).	Government agencies, Scientific Institutions, NGOs	High
	1.2.4. Develop and promote awareness and educational programmes on wildlife protection among herding communities.	NGOs, Government agencies (e.g. education ministries)	High
	1.2.5. Promote sustainable livelihood activities in herding communities to reduce focus on livestock as their main asset.	NGOs, Businesses	High
	1.2.6. Establish joint ministerial working groups (committees) to address pasture use and wildlife protection issues.	Government agencies facilitated by NGOs	High
	1.2.7. Establish and promote volunteer ranger mechanism to create rewards/incentives in herding communities residing near wildlife/protected areas/ecological corridors.	Government agencies, local communities, NGOs	Medium

	1.2.8. Where possible, minimize grazing on migration routes by livestock.	Government agencies, Scientific Institutions, NGOs, herders	High
	1.2.9. Explore options of insuring livestock against natural disasters.	Government agencies, Insurance sector	Medium
	1.2.10. Improve pasture quality and productivity and provide alternative “non-pasture” feeding sources for grazing livestock where feasible.	Government agencies, Scientific Institutions	Medium
1.3. Industry and infrastructure development/ barriers to movement	1.3.1. Make species- and landscape-specific knowledge available, specifically: a) develop common standards for maps, b) develop maps (layers) per country per species (identify key areas), c) develop and update map layers on existing and planned potential barriers, d) make maps (GIS) available at national, bilateral and regional level, e) develop species-specific factsheets (incl. behaviour, ecology, etc.), and f) identify knowledge gaps and initiate targeted applied research.	CMS, UNEP-WCMC (tbc), Government agencies, National scientific institutions, NGOs	High (a) High/medium (b, c, d) Medium (e, f)
	1.3.2. Increase public-awareness on barriers to migration, specifically: a) raise awareness of the broad public on benefits from migratory species, b) raise awareness of the broad public on impacts of barriers on migratory species and possible solutions, and c) conduct information campaigns targeted at decision makers in government, sector and technical agencies.	CMS, Government agencies, National scientific institutions, NGOs, mass-media	High
	1.3.3. Promote the knowledge and application of technical solutions, specifically: a) document technical solutions for specific cases (species, landscape and type of	CMS, Government agencies, National scientific institutions,	High

	<p>barrier),</p> <p>b) establish a knowledge exchange platform (or use of existing ones),</p> <p>c) document and monitor impacts and effectiveness of technical solutions, and</p> <p>d) include the topic of barriers to migration into relevant university curricula.</p>	NGOs	
	<p>1.3.4. Address political issues, specifically:</p> <p>a) establish national and bi-lateral multi-agency task force on border fences (including border security agencies, customs, Ministries of Foreign Affairs, environmental/wildlife agencies, international finance institutions),</p> <p>b) establish national multi-agency task force on big infrastructure projects (i.e. transportation and other relevant ministries),</p> <p>c) integrate migratory species conservation into national EIA regulations and implementation, and</p> <p>d) integrate migratory species conservation into requirements of international financing institutions.</p>	CMS, National focal points, Government agencies, National scientific institutions, NGOs	High/medium
1.4. Good governance of natural resource management/ policy and legislation	1.4.1. Develop/review the existing policies and regulatory frameworks that affect migratory and transboundary species (or policies that create known/identified threats) which are of interest to CMS to address gaps.	Government agencies, National focal points	High
	1.4.2. Identify if the problems exist at the local level or at national level and where the policies are in conflict with each other.	Government agencies, NGOs	High/medium
	1.4.3. Facilitate or support a regional or issue level expert working group meeting that is tasked with developing a strategy for scaling up national policies to a regional level (National, bilateral, trilateral etc.) to harmonize/coordinate differing policies.	CMS, Government agencies	High/medium
	1.4.4. Provide the CAMI POW to multinational forums such as South Asia Association for Regional Cooperation, Shanghai Cooperation and others, in order to promote	INGO, CMS,	Medium

	compliance with the POW and CMS requirements.	Government agencies	
	1.4.5. Involve transport infrastructure, agriculture, border defence sectors, (e.g. OSCE, CAREC, FAO) in CMS relevant technical workshops to represent the interests and capacity of groups which drive identified threats.	CMS, INGO, Government agencies	High
	1.4.6. Create a 'best practice' policy guide for issues that affect migratory and transboundary species in CAMI countries.	CMS, Government agencies, NGOs	High/medium
1.5. Human needs/community engagement in conservation	1.5.1. Promote sustainable livelihood schemes linked to conservation and local conditions, and to whole communities.	National and international NGOs	High
	1.5.2. Support local development (education, health, energy etc.), linked to conservation, linked to whole community needs.	INGOs; Development agencies	Medium
	1.5.3. Establish (and share best practice of) community based insurance schemes (predation, other conflict, bad weather etc.).	As a platform CMS, for implementation: National and international NGOs	High/medium
	1.5.4. Provide culturally and species appropriate activities for teachers using current examples such as establishing Wildlife Clubs and celebrating species days.	National and international NGOs, Government agencies (e.g. education ministry)	Medium
	1.5.5. Build functional associations within and between communities to form implementing and monitoring bodies under the mandate of the national government, e.g. to link communities along migration routes.	Community leaders, local government agencies, NGOs	Medium

	1.5.6. Promote and support the use of local knowledge and skills, e.g. with community based management plans (engagement with strategy definition), scientific research (participatory approaches), reporting outcomes with communities in a suitable language and format.	Local and national NGOs, Research/ Scientific institutions	High/medium
	1.5.7. Promote non-extractive use especially ecotourism: Research the barriers towards wider adoption of ecotourism within Central Asia and how to build and market a desirable package.	NGOs, Tourism companies	Medium
	1.5.8. Integrate biodiversity conservation issues (for migratory species) into the strategies of international and national development agencies.	CMS, Government agencies	High
	1.5.9. Engage community conservationists with direct involvement in conservation initiatives, such as community monitoring or local wildlife champions.	National/Local Government agencies, NGOs	High/medium
	1.5.10. Engage with and encourage investment from additional NGOs and business, especially local large industries (e.g. oil, gas, mining).	CMS, International NGOs currently involved	Medium
1.6. Scientific knowledge	1.6.1. Conduct gap analysis based on scientific evidence across species to understand the limitations and explain those limitations, identify key questions and construct appropriate hypotheses necessary to permit robust knowledge advancement and provide meaningful and unequivocal information to stakeholders.	Scientific institutions, NGOs	High
	1.6.2. Develop and implement science based national programmes (harmonization across regions).	Scientific institutions	Medium
	1.6.3. Develop appropriate monitoring indicators, with fully elucidated confidence	Scientific institutions,	Following

	estimators and guidance for interpretation to track change.	Government agencies, NGOs	completion of gap analysis
	1.6.4. Ensure integration and application of data and findings gathered from scientific research into conservation management planning.	Scientific institutions	High
	1.6.5. Undertake research to increase understanding of landscape permeability as a function of socio economic change, environmental change, protected area configuration.	Scientific institutions	High/ medium
1.7. Transboundary cooperation	1.7.1. Develop an understanding and make best use of political processes, specifically: a) identify the formal processes within each range state concerning adoption of transboundary agreements and feed back to CMS, and b) highlight areas where CMS can have an influence (especially among Parties).	Government agencies, Focal points, CMS	High
	1.7.2. Build on existing agreements, specifically: a) produce an inventory of existing MEAs, governmental/multi-partner agreements and platforms in the CAMI region, building on the CAMI gaps and needs assessment and identify entry-points for enhanced cooperation, b) partner with and integrate migratory species conservation into existing mechanisms such as CITES and development agendas , and c) explore the potential of the Eurasian Customs Region to bolster transboundary conservation (identify opportunities and risks).	INGOs, NGOs, CMS, relevant MEAs and international fora, Government agencies	Medium
	1.7.3. Build on and enhance scientific and working level collaboration, specifically: a) promote formal and informal collaboration through scientific working groups, b) encourage cooperation at field and working level on survey, research and monitoring as well as for study tours and exchange visits.	All NGOs with presence across relevant countries, Scientific institutions	High/medium
	1.7.4. Increase awareness, specifically: a) promote the benefits of transboundary cooperation among governments and	CMS, Focal points,	Medium

	stakeholders, and b) provide positive examples (e.g. from 1.7.3) for successful cooperation and share lessons learned.	Government agencies	
	1.7.5. Strengthen transboundary communication, specifically: a) conduct a communication gap analysis, b) identify the best ways to communicate in order to promote action, and c) identify and increase understanding of the nuances in terms of culture, language and political settings in the different countries in order to communicate correctly.	CMS, Government agencies, NGOs, Scientific institutions	Medium
Objective 2. To guide planning and implementation of prioritized conservation actions at a regional scale			
Landscape and Species	Activity	Responsible	Priority
2.1. Snow leopard & argali (mountain ecosystems)	2.1.1. The following priority transboundary landscapes were identified. Activities for each of them to be aligned with those specified in the GSLEP ¹ , the associated NSLEPS ² and the Argali Single-Species Action Plan: a) Altay-Sayan (China, Kazakhstan, Mongolia, Russia) b) Junggar-Alatau (Kazakhstan, China) c) Saur-Tarbagatay (China, Kazakhstan) d) Inner Tien Shan (China, Kyrgyzstan) e) East Tien Shan (Kazakhstan, Kyrgyzstan, China) f) West Tien shan (Kyrgyzstan, Uzbekistan, Kazakhstan) g) Hissar-Alay (Kyrgyzstan, Tajikistan, Uzbekistan) h) Pamir (Afghanistan, China, Tajikistan, Pakistan) i) Karakorum (Pakistan, Afghanistan, China)	Government agencies, GSLEP Secretariat, CMS, NGOs, Scientific institutions	High

	<p>j) Central Himalaya (Bhutan, China, India, Nepal, Pakistan)</p> <p>k) Qinghai-Tibetan Plateau (China, and small areas of Bhutan, Nepal, India)</p> <p>l) Gobi (China, Mongolia)</p>		
<p>2.2. Gobi-Desert – Eastern Steppes Ecosystem (wild ass, wild camel, Mongolian gazelle, goitered gazelle, Przewalski’s horse)</p>	<p>2.2.1. Address impacts from linear Infrastructure and maintain landscape permeability, specifically:</p> <p>Fences</p> <p>a) Map existing fences across the landscape in a spatial (GIS) database, including important meta-data,</p> <p>b) mitigate impact of existing fences through removal or modification to wildlife friendly designs,</p> <p>c) strengthen EIA requirements so that fences that are required or proposed are assessed as to their necessity and if so, ensure that they are wildlife friendly and appropriate to all species affected. (i) Assess the legal framework which exists (Joint ownership of railroads, Border security policies). (ii) Create working group to assess best practice standards or take the lead in defining new ones, and</p> <p>d) explore issues/options related to increasing border fence permeability.</p> <p>Roads</p> <p>e) map roads of existing or predicted high volume (>1,000 vehicles/day),</p> <p>f) develop mitigation strategies, i.e. (i) wildlife passage structures that are appropriate to the landscape and species, (ii) ensure requirement for mitigating is necessary, (iii) conduct research, (iv) promote public engagement for support of mitigation, (v) engage in high level discussions with lending agencies/government officials in charge of infrastructure development decisions, and</p> <p>g) improve EIA process (see fences).</p> <p>Railroads</p> <p>h) map no go areas and suitable areas for alignment to guide planners,</p>	<p>Government agencies, Mining and infrastructure companies, Private sector, Scientific institutions, NGOs, INGOs</p>	<p>High</p>

	<p>i) conduct research to determine whether khulan will cross an unfenced track,</p> <p>j) improve EIA process, and</p> <p>k) incorporate landscape permeability concepts for regional-scale development of roads and railways.</p>		
	<p>Land Tenure</p> <p>2.2.2 Undertake mapping and research to elucidate the effects of variable land tenure, and consequential management, on landscape permeability.</p> <p>2.2.3. Initiate a multi-agency working group to monitor and discuss solutions to keeping landscapes permeable.</p>	Government agencies, Scientific institutions	High/medium
	<p>Political dialogue</p> <p>2.2.4. Fast track ongoing transboundary discussions.</p>	Government agencies, CMS	High/medium
	<p>2.2.5. Strengthen or expand transboundary protected area networks which promote conservation of long-distance migrants in the Gobi-Desert-Eastern Steppe-Ecosystem (wild camel, khulan, Przewalski's horse to start with).</p>	Government agencies, CMS, NGOs	Medium
	<p>2.2.6. Develop a single species action plan for the wild ass.</p>	IUCN Equid Specialist Group, CMS, Government agencies, Scientific institutions, NGOs	High
	<p>2.2.7. Establish transboundary cooperation and coordination for the conservation of Przewalski's horse among Range States.</p>	Government agencies, Scientific institutions, CMS, NGOs, International	High/medium

		Takhi Group (ITG)	
2.3. South-west region (Cheetah, goitered gazelle, chinkara, wild ass [khulan/onager], Przewalski's horse, Transcaspian urial³)	Cheetah (Afghanistan, Iran (Islamic Republic of), Pakistan, Turkmenistan)		
	2.3.1. Increase number and/or size of protected areas and connectivity between them in Iran.	Department of Environment Iran (DOE), Iranian Cheetah Society (ICS), NGOs	High
	2.3.2. Enhance effectiveness of protected areas through identification of corridors and a landscape approach (north-east, central-south Iran).	DOE, ICS, NGOs	High/Medium
	2.3.3 Conduct field surveys of potential habitat in areas of Afghanistan and Pakistan neighbouring Iran.	Government agencies, Scientific institutions, NGOs	High/Medium
	2.3.4. Collect information on distribution and threats (e.g. through telemetry).	ICS, Scientific institutions, NGOs, Government agencies	Medium
2.3.5. Conduct cheetah workshop in Iran and develop a regional programme for conservation and restoration of cheetah.	Government agencies, ICS, NGOs, IUCN Cat Specialist Group	High	

	<p>Ustyurt landscape (Kazakhstan, Turkmenistan, Uzbekistan; Wild ass, goitered gazelle, Transcaspian urial, saiga)</p> <p>2.3.6 Monitor khulan movements, including telemetry methods.</p> <p>2.3.7. Promote creation of protected areas, based on scientific justification.</p> <p>2.3.8. Increase transboundary cooperation on Ustyurt.</p>	<p>Government agencies, NGOs, Scientific institutions</p> <p>2.3.8. plus CMS, Saiga MoU</p>	<p>High/Medium</p>
	<p>Khulan/onager (Iran (Islamic Republic of), West Afghanistan, South Turkmenistan, Uzbekistan, Kazakhstan, Kyrgyzstan)</p> <p>2.3.9. Collect information on distribution and threats, including telemetry studies.</p> <p>2.3.10. Identify corridors and potential additional habitats.</p> <p>2.3.11 Assess feasibility of reintroduction to Alai Valley, Kyrgyzstan.</p> <p>2.3.12. See Activity 2.2.6</p>	<p>Government agencies, NGOs, Scientific institutions</p> <p>2.3.11. Kyrgyz state agency, NGOs, Scientific institutions</p>	<p>Medium</p>
	<p>Goitered gazelle (Issyk-Kul, Ustyurt, Kyzylkum, Karakum, Afghanistan, Iran (Islamic Republic of), Pakistan)</p> <p>2.3.13. Assess reintroductions where needed and where suitable habitat exists.</p> <p>2.3.14. Develop sub-regional programme for conservation and restoration of the species.</p> <p>2.3.15. Assess impact of linear infrastructure on goitered gazelles and develop and implement mitigation measures (as 1.3.).</p> <p>2.3.16. Review legislation to combat wildlife crime (as 1.1).</p>	<p>Government agencies, NGOs, Scientific institutions,</p> <p>2.3.14. plus IUCN Antelope Specialist Group</p>	<p>High/medium</p>

	<p>Chinkara (Iran (Islamic Republic of) and neighbouring areas of Afghanistan and Pakistan)</p> <p>2.3.17. Assess reintroductions where needed and where suitable habitat exists.</p> <p>2.3.18. Develop sub-regional programme for conservation and restoration of the species.</p>	Government agencies, NGOs, Scientific institutions, IUCN Antelope Specialist Group	Medium
2.4. Qinghai-Tibetan Plateau (China, Bhutan, India, Nepal, Pakistan)	2.4.1. Develop a multi-species action plan for Qinghai-Tibetan plateau ungulates (chiru, kiang, Tibetan gazelle and argali, plus Przewalski's gazelle ³ , white-lipped deer ³ , blue sheep ³).	Government agencies, Scientific institutions, IUCN, NGOs	High/Medium
	2.4.2. Coordinate transboundary activities at national and provincial levels.	Government agencies, others	Medium
	<p>Species information</p> <p>2.4.3. Compile and integrate species distribution and movement information across the plateau.</p> <p>2.4.4. Continue efforts to assess the threat of poaching and illegal wildlife trade- especially in border areas.</p> <p>2.4.5. Identify biologically important hotspots of species of concern at international and provincial border areas.</p> <p>2.4.6. Develop coordinated management plans for species across provinces.</p>	Government agencies, Scientific institutions, NGOs	High/Medium

	<p>Infrastructure threats</p> <p>2.4.7. Review infrastructure development plans to ensure no adverse impact on species of concern (as 1.3).</p> <p>2.4.8. Incorporate species considerations (including migration) into national level plans and programmes such as the national key ecological function zone planning.</p> <p>2.4.9. Highlight the contribution of action plans to the ecological red line strategy currently under consideration.</p>	Government agencies	Medium
	<p>Protected area policy</p> <p>2.4.10. Strengthen existing protected areas and consider the creation of new protected areas to incorporate identified hotspots.</p>	Government agencies, Scientific institutions	Medium/Low
	<p>2.4.11. Integrate community-based conservation into protected area legislation and practice.</p>	Government agencies, NGOs	High/medium
<p>2.5. Bukhara deer (tugai forests of Afghanistan, Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan)</p>	<p>2.5.1. Approve the reporting format on implementation of the Bukhara deer MoU, and a format for proposals for short-term and long-term revision of the Action Plan.</p> <p>2.5.2. Develop, evaluate and approve national level plans of targeted activities for the next 5-10 years.</p> <p>2.5.3. Request governments of the range countries to present a progress report and proposals for Action Plan revision (if necessary) once every 2 years. (Request to submit reports should follow official protocol: from the CMS Secretariat to the Ministries of Foreign Affairs of the range states with copies to the relevant Ministries/State Committees).</p> <p>2.5.4. Ensure regular information exchange between range states, including regular meetings of the Signatories of the MoU through the CMS Secretariat or an authorized MoU Coordinator, supported by the CMS Secretariat.</p>	CMS, Government agencies, WWF Central Asia Programme	High

Objective 3. To facilitate knowledge exchange, communication and the promotion of synergies			
Issue	Activity	Responsible	Priority
3.1. Knowledge and Data sharing	3.1.1. Identify and establish mechanisms for data and knowledge storage and sharing within the CAMI.	CMS, IUCN Transboundary Specialist Group newsletter	High
	3.1.2. Determine feasibility of data sharing, considering potential obstacles (e.g. ownership, access, intellectual copyright) and identify ways to overcome them.	NGOs, CMS, Scientific institutions	Low
	3.1.3. Conduct a needs analysis of data requirements for stakeholders within CAMI.	NGOs, CMS	Medium
	3.1.4. Analyse data collected to highlight relevant conservation applications.	CMS, NGOs, Scientific institutions	Low
	3.1.5. Ascertain suitable templates from existing sources such as Saiga Resource Centre; Saiga News; Cat News, etc.	CMS, NGOs	Medium
	3.1.6. Conduct a gap analysis of existing information sources and routes of dissemination.	NGOs, CMS	High
	3.1.7. Establish an “Asian Scientific Initiative for Conservation of Migration” to facilitate science communications: information exchange among institutions, building network facilitated by CMS, capacity building.	CMS, Scientific institutions, NGOs	High/medium
	3.1.8. Collect information including existing species action plans on the CMS website and consider developing Action Plans for species that do not have one.	CMS, NGOs, Government agencies	High

Objective 4. To support implementation, coordination and resourcing of the CAMI			
Issue	Activity	Responsible	Priority
4.1. Coordination mechanism for CAMI	4.1.1. Establish the position of a coordinator for Central Asia within the CMS Secretariat to enable sustainable and long-term Secretariat services for the CAMI.	CMS	High
	4.1.2. Identify and nominate species focal points (and in the process review suitable platforms such as Snow Leopard Network, IUCN Specialist Groups), and publish on CMS website.	CMS, NGOs, INGOs, Scientific institutions	High
	4.1.3. Identify CAMI focal points for each country and publish on CMS website.	CMS, Government agencies	High
	4.1.4. Conduct regular technical, thematic, ecoregion workshops.	CMS, Government agencies, NGOs, GIZ (tbc)	High/Medium
	4.1.5. Organize an intersessional meeting of CAMI members (every 2½ years – in 2017).	CMS, GIZ (tbc)	Medium
	4.1.6. Identify means to connect different CAMI focal points to discuss issues of mutual concern and advance implementation (such as through a formal focal points group).	CMS, GIZ (tbc), NGOs, INGOs	High/Medium
	4.1.7. Establish transboundary working groups to maintain progress and communication between CMS meetings/COPs.	CMS, GIZ (tbc)	High/Medium

	4.1.8. Ensure national consultation of the POW in the relevant ministries after endorsement at the COP11 for national review and approval.	Government agencies, CMS	High
4.2. Funding implementation	4.2.1. Promote co-funding to donor initiatives from governments as well as co-funding from donors to government initiatives.	Government agencies	High/Medium
	4.2.2. Use money from sustainable wildlife use for implementing conservation activities (e.g. trophy hunting and others) in cooperation with CITES.	Government agencies, NGOs, CITES	High/Medium
	4.2.3. Establish a trust fund, including with funding from mining and hydropower companies.	Government agencies, CMS, Private sector companies	Medium
	4.2.4. Include conservation actions for migratory species in the existing/updated/elaborated State programmes on nature protection.	Government agencies	High
	4.2.5. Use national environmental funds that exist under state bodies and include measures on migratory species.	Government agencies	High/Medium
	4.2.6. Conduct an 'Inventory' of donors and funding programmes and identify a "champion" for CAMI.	NGOs, Government agencies, CMS	Medium
	4.2.7. Channel the money from environmental payments to nature conservation activities (currently these payments go to the national budgets and are distributed to other purposes).	Government agencies	Medium
	4.2.8. Use and develop regional or landscape approaches for fundraising – not only single country projects.	Coordination from CMS, Government agencies, NGOs	Medium

	4.2.9. Explore funding options through the Global Environment Fund (GEF) (including Small Grants Programme) projects – joint proposals between several countries should be developed with involvement of GEF implementing agencies (WB, ADB, UNDP) in the processes of project application.	Government agencies, NGOs, CMS	High/Medium
	4.2.10. Strengthen bilateral cooperation between countries as well as with donors in fundraising and joint project development.	Government agencies, Donors, CMS	Medium
	4.2.11. Initiate systematic awareness raising among private companies (Corporate Social Responsibility funds).	NGOs	Low
	4.2.12. Consider organizing charity events to mobilize funding for CAMI.	Government agencies, NGOs, CMS	Low
	4.2.13. Include biodiversity conservation measures into the contracts with mining companies (e.g. to Product Sharing Agreements).	Government agencies, Companies	Medium
4.3 Awareness raising	4.3.1. Raise awareness and understanding about the importance of the Central Asian region for migratory mammals at all levels through all means.	CMS, Government agencies, NGOs	High

Notes: ¹GSLEP = Global Snow Leopard & Ecosystem Protection Program; ²NSLEP = National Snow Leopard & Ecosystem Protection Programme.

³Species occurring within the same landscape but not formally part of CAMI.

Annex II

Vilm Declaration of Intent



Federal Ministry for the
Environment, Nature Conservation
and Nuclear Safety



Workshop on Minimizing Conflicts between Migrating Wildlife and Mining in Central Asia

International Academy for Nature Conservation Isle of Vilm /Germany, 20th – 24th June 2013

Declaration of Intent

Representatives of the Governments of Mongolia, Kazakhstan, Kyrgyzstan and Germany, the Convention on the Conservation of Migratory Species of Wild Animals (CMS), several scientific institutions and non-governmental organizations, as well as a panel of experts came together to discuss

1. mining and infrastructure development in Central Asia and its impact on migratory and nomadic ungulates, with a special focus on Mongolia, Kazakhstan and Kyrgyzstan;
2. existing relevant national and international legislation and standards, implementation and enforcement options and requirements;
3. international experience and best practice examples, as well as existing mitigation, offset and compensation measures and potential solutions;
4. key factors hindering and enabling effective implementation of the solutions and mitigation measures;
5. next steps and actions to be initiated within one year, until the next workshop in 2014.

The participants of the meeting

Concerned that Central Asia is a region of global importance for many endangered migratory ungulates, which rely on interconnected steppe and desert ecosystems that enable essential long-distance movements and ensure their long-term survival;

Recognize the rapid development of exploration activities, extractive industries and infrastructure in Kazakhstan, Kyrgyzstan and Mongolia. Without careful planning and mitigation these developments will have a serious negative impact on ecosystem function by restricting the movements of wild ungulates resulting in the loss of “migratory landscapes”;

Note that the species concerned are listed on the Appendices of the CMS and that CMS Parties adopted several provisions and Resolutions relating to the need for maintaining ecological

networks and removing any obstacles that might hinder the migrations of species, as well as recognizing that Central Asia is a priority region for CMS;

Aware that long-distance movements of nomadic species are unpredictable (relative to migratory species, as traditionally defined);

Further aware that the conservation of migratory species and their habitats provide essential ecosystem services, such as maintaining optimal foraging across a highly variable habitat resulting in increased carbon storage capacity of the grasslands, as well as cultural heritage values and economic benefits including sustainable tourism;

Recall that the Government of Germany signed bilateral partnerships with the Governments of Mongolia and Kazakhstan regarding the exploitation of raw materials and that these partnerships include sustainability provisions for social and ecological safeguards;

Have considered existing recommendations, measures and procedures needed to effectively mitigate the negative impacts from infrastructure, exploration activities and extractive industries;

HEREBY

Declare their intent to implement the following Action Plan for the mitigation of the impacts of infrastructure, exploration activities and extractive industries in Central Asia and Mongolia, and to share experiences on the implementation of those activities at the second meeting in 2014.

Solution/Action	Lead	Activity	Time
1. Remove fences along railways	Ministry for the Environment and Green Development Mongolia (MEGD) in coll. with group members	1.1 1 st meeting of joint ministerial working group to agree on fence removal and modifications	Early July
	MEGD	1.2 Fence subgroup to plan the fence removal and related activities incl. soft slopes	July 2013
	MEGD	1.3 Remove the fence in 2 priority sites	September 2013
	MEGD	1.4 Set up monitoring of effectiveness of fence removal and present results to decision-makers	Parallel to fence removal activities; Report to be presented in July 2014
	MEGD	1.5 Consider study visit of Transport Ministry and Railway Company to	After September 2013

		Kazakhstan (KZ)	
		1.6 consider to change legislation / standards with regard to new railroads based on pilot results	
2. Where fences have to remain, make them wildlife friendly (border fences in KZ, railroad fence in Mongolia (MG))	MEGD /Ministry of Environment (ME) KZ In coll. with security / military; neighboring countries	2.1 MG: To be planned by the sub-group (identify priorities, funding options, technical options, taking poaching risks into consideration, monitoring etc.)	Identify priorities by July 2014
		2.2 MG: Start with fence modification on priority sites	By 2015
	Association for the Conservation of Biodiversity Kazakhstan (ACBK), ME	2.3 KZ: Develop and submit recommendations to the Ministry of Env. for submission to the border guard, and monitor effectiveness	By summer 2013
	Workshop organizers	2.4 Disseminate lessons learned on fence removal and fence modification to other Central Asian countries	By 2014 (next workshop)
	CMS	2.5 Share Saiga recommendations with China and other Central Asian countries	By August 2013
3. Improve green economic leverage for funding wildlife-friendly infrastructure	MEGD; Wildlife Conservation Society Mongolia (WCS)	3.1 Study international experiences of green economic leverage for funding wildlife-friendly infrastructure	By end of 2013
		3.2 Organize workshop on result of above study	2014
		3.3 Frame draft legislation for suitable funding strategies for wildlife-friendly infrastructure	2014
4. Road curfews	WCS, MEGD	4.1 Approach OT and ER again to discuss curfews as a mitigation option and ask them to test it and monitor wildlife movements	Start 2013, monitor longer
		4.2 Monitor existing curfews to understand effectiveness	Start 2013
		4.3 Consider upscaling if it works (identifying further roads, species)	
5. Over- and underpasses (green bridges)	WCS	5.1 Develop project proposal on under- and overpasses, and monitor effectiveness, seeking permission from Mongolian authorities	
	MEGD, WCS	5.2 Convene meeting with scientists to determine how existing herder under- and overpasses of the railroad might suit the needs of some species; monitoring existing underpasses	2013

	Ministry of Road and Transportation	5.3 Build crossing aids for new railroads (based on KZ experience) and also under- and overpasses for busy roads despite limited knowledge	
6. Anti-poaching actions	MEGD, ME KZ, ME Kyrgyzstan (KG)	6.1 Develop and implement public awareness programme (ME KZ)	2013
	MEGD	6.2 Strengthen technical capacity of border staff /customs (dogs, etc.) ; explore funding for that; explore possibility for Mongolian custom officer /rangers to take part in KZ trainings	2014
	WCS (and Oyu Tolgoi OT)	6.3 Continue and expand anti-poaching work in South Gobi (programme to be coordinated with MEGD and provincial govt)	Ongoing, main phase 2013/2014
	MEGD	6.4 Continue collaborative approach to anti-poaching	ongoing
	MEGD	6.5 Discuss with mining companies what they could do to reduce poaching of their staff in the frame of the MoU	2013
	State Agency on Environmental Protection with support from NABU / Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ)	6.6 Upscale community engagement work in KG;	To be started soon
	ME KZ in coordination with NGO	6.7 Strengthen collaboration with other institutions and stakeholders (i.a. hunting concessions) in charge	To be started soon
7. Early stage planning (including EIA), to identify and implement best solutions before construction (routes, technical solutions etc).	MEGD to approach donors; Flora & Fauna International (FFI) could assist in capacity building activities in KZ	7.1 Capacity building for consultancies conducting EIA	To be started 2013
		7.2 Capacity building for government staff	
	GIZ as commissioned by MEGD	7.3 Develop guidance on how to calculate damage caused by the mining industry	July 2014
8. Strategic environmental assessment of infrastructure	MEGD	8.1 Develop methodology for SEA	By autumn 2013

planning			
9. Ensure that laws & legislation contains environmental standards and safeguards (for infrastructure planning)	ME in KZ with involvement of ACBK; ME in KG MEGD	9.1 Review and if necessary revise EIA law in KZ and develop law in KG;	To be started when funding is available
		9.2 Review standards (railway, underpasses) in MG	To be started in 2014
10. National mitigation and offset strategy	MEGD	10.1 Translate (seek funding for this, maybe from GIZ or WB) and review existing relevant reports	2013
	MEGD	10.2 Prioritize and discuss with relevant stakeholders	
	WCS	10.3 Use Business and Biodiversity Offset Programme (BBOP) webinars for getting more info from case studies on how to set up an offset /mitigation strategy addressing legal, institutional, financial and technical aspects	
	WCS	10.4 Explore how BBOP could assist Mongolia	2013
	BMU	10.5 Address German Federal Ministry for Economic Cooperation and Development (BMZ) on how Germany could assist MG in this	Summer 2013
	MEGD/Mong. Govt	10.6 Put this issue on the agenda for the next bilateral Mongolian German governmental consultations in autumn this year	Autumn 2013
11. Landscape level land-use planning	The Nature Conservancy Mongolia (TNC) (in coll. with MEGD)	11.1 TNC “Development by Design” approach to cover rest of the country; all information will be made available	ongoing
	MEGD	11.2 Integrate information /results in revised NBSAP	ongoing
	ACBK	11.3 Continue and expand the process in KZ and share lessons learned	ongoing
12. Better management, accessibility, transparency of environmental data (laws, plans, strategies)	WCS	12.1 Biodiversity data base from OT project (South Gobi) accessible; Links to laws etc. to be provided as well; English translation of legislation	2013
	TNC	12.2 Data from Development by Design Project to be made public	2014
	World Wide Fund for Nature WWF	12.3 GIS information in Web on planned infrastructure, biodiversity	In the past;; but no update now

	MEGD	12.4 Combine different resources and data bases	2014
	ACBK	12.5 Ensure inflow of data in Biodiversity Monitoring Data Base and maintain it	ongoing
13. Systematic monitoring of wildlife and habitat	MEGD in coll. with science	13.1 Develop institutional structure for central method design, collection and analysis of monitoring data 13.2 Explore funding for sustained monitoring and data processing and analysis 13.3 Develop concepts and methodology on how to do the monitoring for the entire country (not just PAs) 13.4 Use experience from other countries	Mid-term
	ME in KG	13.5 Analyse monitoring methods from different projects and consider upscaling	
	ACBK, FFI, Forestry and Hunting Committee KZ	13.6 Develop Monitoring protocols for Ustyurt Saiga range	By 2014
14. Improved cooperation, communication and coordination (between government and all stakeholders)	MEGD	14.1. Regular meetings of the joint ministerial working group, and the sub groups (standards & regulations, research, planning & strategy, fences, mining & cumulative impacts of infrastructure, roads & railway construction, funding) <i>inter alia</i> to develop integrated work plan of the ministry with input from stakeholders	Starting in July 2013 (further meetings to be decided by the group)
	MEGD	14.2. Regular meetings of government, scientist NGOs and private sector (to be initiated and convened by the MEGD)	2013/2014
	MEGD	14.3 Systematically collect information on ongoing and planned research projects and facilitate a research cooperation platform (to be discussed in the research sub-group)	To be decided by the first meeting of the working group
15. Programme and action plan under the MOU between government & companies (MN and KG)	MEGD	15.1. Develop a joint action plan for 1 year with indicators how to measure those activities 15.2. Share that action plan with other countries to promote similar agreements	End of 2013
16. Lobby for alternative	German Federal Ministry for the	16.1. BMU to raise the topic in its governmental consultations with	June/July 2013

railway route planning (and construction) in Kazakhstan	Environment and Nature Conservation (BMU)	Kazakhstan	
	ACBK/FFI	16.2. Work with UNDP and the US Embassy to lobby for the alternative route.	ongoing
	CMS	16.3. Letter to the Kazakh government	July 2013
17. Promotion: pride of nomadic heritage (“land without fences”) campaign	WCS	17.1. Highlight the motto (land without fences) in the documentary about the study tour to the US	Summer 2013
	MEGD	17.2. work with tourism association to promote the motto	Start 2013
	CMS	17.3. Fundraise for a short trailer	Start 2013
18. Ratify CMS	State Agency of Environmental Protection, Forestry Services (Kyrgyzstan)	18.1. Promote and support ratification procedure	End of 2013