

**BTC PROJECT AND IFC SAFEGUARD POLICIES OP 4.04 NATURAL
HABITATS AND OPN 11.03 CULTURAL PROPERTY**

APRIL 2003

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**BTC Project and IFC Safeguard Policies OP 4.04 Natural Habitats and OPN
11.03 Cultural Property**

1.0 INTRODUCTION

This document has been prepared to detail the project position with regard to compliance with IFI safeguard policies OP4.04 concerning Natural Habitats and OPN 11.03 on Cultural Property and to provide details of the offset mitigation proposed where significant residual impacts have been identified for critical natural habitat, natural habitat or cultural property.

The budgets are estimated to amount to the following:

Country	Budget
Azerbaijan	275,000
Georgia	1,300,000
Turkey	950,000
Total	2,525,000

The final budgets will depend upon such factors as the leveraging of other funds and resources.

Expenditure will be over the period 2Q 2003 – 1Q 2005.

2.0 OP4.04 NATURAL HABITATS

The following table details the requirements of OP4.04 Natural Habitats and the rationale for why the project believes it is in compliance

Table 1: OP 4.04 Elements & BTC Project Compliance Rationale

Para No.	OP 4.04 Element	BTC Project Compliance Rationale
1	<p>The conservation of natural habitats, like other measures that protect and enhance the environment, is essential for long-term sustainable development. IFC therefore supports the protection, maintenance, and rehabilitation of natural habitats and their functions in its project financing and advisory activities. IFC supports, and expects project sponsors to apply, a precautionary approach to natural resource management to ensure opportunities for environmentally sustainable development. As part of a private sector project IFC supports natural habitat conservation, improved land use and the maintenance of ecological functions. Furthermore, IFC promotes the rehabilitation of degraded natural habitats</p> <p><i>Annex A, Definitions 1:</i> <i>Natural habitats are land and water areas where (i) the ecosystems' biological communities are formed largely by native plant and animal species, and (ii) human activity has not essentially modified the area's primary ecological functions.</i> <i>All natural habitats have important biological, social, economic, and existence value. Important natural habitats may occur in tropical humid, dry, and cloud forests; temperate and boreal forests; Mediterranean-type shrublands; natural arid and semi-arid lands; mangrove swamps, coastal marshes, and other wetlands; estuaries; seagrass beds; coral reefs; freshwater lakes and rivers; alpine and subalpine environments, including herbfields, grasslands, and paramos; and tropical and temperate grasslands</i></p>	<p>The selection of the pipeline route has involved the implementation of a rigorous, and robust process taking account of all the relevant factors. These factors include:</p> <ul style="list-style-type: none"> • Environmental and social issues – including protected areas, flora, fauna, hydrogeology, landscape, livelihoods, cultural heritage, reinstatement potential and requirements, land use, places of habitation. Of relevance to the policy, great efforts have been made to avoid internationally and nationally protected areas and areas of high habitat quality; • Terrain evaluation and geohazard assessment – including seismic faults, landslides, slope stability; • Constructability and long-term integrity – including access and logistics assessments, reinstatement, river, gorge and gully crossings; • Security – including terrorism, sabotage, civil unrest; • Safety and health <p>A precautionary approach was one of the key principles in the analysis of potential impacts and the development of mitigation measures to ensure that risks are minimised and that habitats and species are not detrimentally affected.</p> <p>In some cases the implementation of the project will allow the improvement of degraded natural habitats. Examples include management planning for the proposed Gobustan National Park and the Ktsia-Tabatskuri Managed Reserve both of which incorporate degraded areas.</p>
3	IFC does not support projects that, in IFC's opinion, involve the significant conversion	Whilst the project affects areas of critical natural Habitats (Gobustan proposed

Para No.	OP 4.04 Element	BTC Project Compliance Rationale
	<p>or degradation of critical natural habitats</p> <p><i>Annex A, Definitions 1 (b):</i> <i>Significant conversion is the elimination or severe diminution of the integrity of a critical or other natural habitat caused by a major, long-term change in land or water use. Significant conversion may include, for example, land clearing; replacement of natural vegetation (e.g., by crops or tree plantations); permanent flooding (e.g., by a reservoir); drainage, dredging, filling, or channelization of wetlands; or surface mining. In both terrestrial and aquatic ecosystems, conversion of natural habitats can occur as the result of severe pollution. Conversion can result directly from the action of a project or through an indirect mechanism (e.g., through induced settlement along a road</i></p> <p><i>Annex A, Definitions 1 (b):</i> <i>Degradation is modification of a critical or other natural habitat that substantially reduces the habitat's ability to maintain viable populations of its native species.</i></p> <p><i>Annex A, Definitions 1 (a):</i> <i>Critical natural habitats are:</i></p> <p>(i) <i>existing protected areas and areas officially proposed by governments as protected areas (e.g., reserves that meet the criteria of the World Conservation Union [IUCN] classifications), areas initially recognized as protected by traditional local communities (e.g., sacred groves), and sites that maintain conditions vital for the viability of these protected areas (as determined by the environmental assessment process); or</i></p> <p>(ii) <i>sites identified on supplementary lists prepared by the World Bank or an authoritative source determined by IFC's Environment and Social Development Department. Such sites may include areas recognized by traditional local communities (e.g., sacred groves); areas with known high suitability for biodiversity conservation; and sites that are critical for rare, vulnerable, migratory, or endangered species⁴. Listings are based on systematic evaluations of such factors as species richness; the degree of endemism, rarity, and vulnerability of component species;</i></p>	<p>National Park, Azerbaijan; Ktsia-Tabatskuri Managed Reserve, Georgia & Posof Wildlife Protection Area, Turkey) the effects would not involve significant degradation or conversion for the following reasons:</p> <ul style="list-style-type: none"> - The area of land affected both directly and indirectly is relatively small in terms of the extent of the habitat parcel and would not affect the integrity of the system; - As far as possible the project has been sited to avoid key areas of critical natural habitats and is located in degraded parts of the habitat; - Landtake has been minimised e.g. reduction of the construction corridor; prohibition on selected additional project facilities; - The land take is temporary due to the progress of construction activity and the implementation of site specific re-instatement; - A series of both direct and offset mitigation measures would be implemented (see Table 2); - Construction pollution effects would be limited by specific controls; - The oil spill risk assessment involved an evaluation of environmental sensitivities that directed the development of mitigation measures; - Environmental sensitivities were factored into the oil spill risk assessment to allow for modifications of pipeline design to reduce risk and target susceptible locations for subsequent spill management plans being developed; - Mitigation measures have been put in place to address secondary impacts

Para No.	OP 4.04 Element	BTC Project Compliance Rationale
	<i>representativeness; and integrity of ecosystem processes.</i>	
4	<p>Wherever feasible, IFC financed projects are sited on lands already converted (excluding any lands that in IFC's opinion were converted in anticipation of the project). IFC does not support projects involving the significant conversion of natural habitats unless there are no feasible alternatives for the project and its siting, and comprehensive analysis demonstrates that overall benefits from the project substantially outweigh the environmental costs.</p> <p>If the environmental assessment indicates that a project would significantly convert or degrade natural habitats, the project includes mitigation measures acceptable to IFC. Such mitigation measures include, as appropriate, minimizing habitat loss (e.g., strategic habitat retention and post-development restoration) and establishing and maintaining an ecologically similar protected area. IFC accepts other forms of mitigation measures only when they are technically justified.</p> <p><i>Annex A, Definitions 1 (d): Appropriate conservation and mitigation measures remove or reduce adverse impacts on natural habitats or their functions, keeping such impacts within socially defined limits of acceptable environmental change. Specific measures depend on the ecological characteristics of the given site. They may include full site protection through project redesign; strategic habitat retention; restricted conversion or modification; reintroduction of species; mitigation measures to minimize the ecological damage; post development restoration works; restoration of degraded habitats; and establishment and maintenance of an ecologically similar protected area of suitable size and contiguity. Such measures should always include provision for monitoring and evaluation to provide feedback on conservation outcomes and to provide guidance for developing or refining appropriate corrective actions.</i></p>	<p>The majority of the route is situated on areas modified for agricultural use and of limited conservation value – in Azerbaijan 62% of the route is on agricultural land; in the order of 35% in Georgia and 49% in Turkey. In addition, substantial areas of semi-natural habitat crossed by the pipeline are modified by human activity since they are used for grazing and hay making.</p> <p>The project is believed to offer a significant benefit to each of the countries and the region. Such benefits include not only the direct payments of tariffs paid to the host country governments but other tangible and intangible economic and social benefits; community, environment and social investment programmes and environmental opportunities</p> <p>A comprehensive programme of direct and offset mitigation measures have been designed to address potential effects on critical natural habitats; important natural habitats and internationally / nationally protected species. These mitigation measures have the key aim of keeping impacts within the limits of acceptable change. Further, an additionality programme taking the form of an Environmental Investment Programme will be implemented.</p> <p>The mitigation measures and additionality benefits are detailed in <i>Table 2</i>.</p>
5	<p>In deciding whether to support a project with potential adverse impacts on a natural habitat, IFC takes into account the project sponsor's ability to implement the appropriate conservation and mitigation measures. If there are potential capacity problems with a project sponsor, the project includes a component to build additional capacity for effective environmental planning and management.</p>	<p>The project sponsors and advisors have full capacity to be able to implement the mitigation and additionality measures.</p>

Para No.	OP 4.04 Element	BTC Project Compliance Rationale
6	In projects with natural habitat components, project appraisal and supervision arrangements include appropriate environmental expertise to ensure adequate design and implementation of mitigation measures by the project sponsor	Extensive use was made of specialist expertise in the identification of environmental sensitivities and in the development of appropriate mitigation. There was a high reliance on local input through both the involvement of local scientists in the studies and impact assessment and in consultation with national stakeholders during the ESIA. It is expected that local scientists will be involved in the implementation of a number of the key mitigation measures. International stakeholders have also been involved in the process.
7	This policy applies to investments through financial intermediaries when IFC funds are targeted to specific subprojects	The policy is directly relevant to the BTC project
8	IFC expects the project sponsor to take into account the views, roles, and rights of groups, including local nongovernmental organizations and local communities, affected by IFC-financed projects involving natural habitats, and to involve such people in planning, designing, implementing, and monitoring such projects. Involvement may include identifying appropriate conservation measures, managing protected areas and other natural habitats, and monitoring projects. IFC encourages the project sponsor to provide such people with appropriate information on the protection of natural habitats.	There has been extensive consultation in each of the countries with government agencies, local specialists, organisations and communities in project affected areas. This liaison is planned to continue during project implementation and monitoring.

3.0 OPN 11.03 CULTURAL PROPERTY

The following table describes the requirements of OPN 11.03 Cultural Property and project compliance rationale

Table 2: OPN 11.03 Elements & BTC Project Compliance Rationale

Para no.	OPN 11.03 Element	BTC Project Compliance Rationale
1	The United Nations term “cultural property” includes sites having archeological (prehistoric), paleontological, historical, religious, and unique natural values. Cultural property, therefore, encompasses both remains left by previous human inhabitants (for example, middens, shrines, and battlegrounds) and unique natural environmental features such as canyons and waterfalls. The rapid loss of cultural property in many countries is irreversible and often unnecessary. Detailed background information on all aspects of this note are contained in the technical paper of the same title, available from the Office of Environmental and Scientific Affairs, Projects Policy Department, which is ready to provide assistance on request.	Definition of cultural heritage follows OPN 11.03
2	<p>The World Bank’s general policy regarding cultural properties is to assist in their preservation, and to seek to avoid their elimination. Specifically:</p> <p>(a) The Bank normally declines to finance projects that will significantly damage non-replicable cultural property, and will assist only those projects that are sited or designed so as to prevent such damage.</p> <p>(b) The Bank will assist in the protection and enhancement of cultural properties encountered in Bank-financed projects, rather than leaving that protection to chance. In some cases, the project is best relocated in order that sites and structures can be preserved, studied, and restored intact in situ. In other cases, structures can be relocated, preserved, studied, and restored on alternate sites. Often, scientific study, selective salvage, and museum preservation before destruction is all that is necessary. Most such projects should include the training and strengthening of institutions entrusted with safeguarding a nation’s cultural patrimony. Such activities should be directly included in the scope of the project, rather than being postponed for some possible future action, and</p>	<p>A comprehensive staged investigation has been undertaken of cultural heritage resources to allow avoidance of cultural property as far as possible. This has included re-routing to avoid features. Where avoidance has not been possible, investigations have been undertaken to study the resource and preserve artefacts.</p> <p>The involvement of international experts in combination with national experts has enabled technology transfer and capacity building.</p> <p>In the one case where a site designated on the basis of cultural resources would be affected the impacts have been minimised and offset mitigation put in place (see Table 4?).</p>

Para no.	OPN 11.03 Element	BTC Project Compliance Rationale
	<p>the costs are to be internalized in computing overall project costs.</p> <p>(c) Deviations from this policy may be justified only where expected project benefits are great, and the loss of or damage to cultural property is judged by competent authorities to be unavoidable, minor, or otherwise acceptable. Specific details of the justification should be discussed in project documents.</p> <p>(d) This policy pertains to any project in which the Bank is involved, irrespective of whether the Bank is itself financing the part of the project that may affect cultural property.</p>	
3	<p>The management of cultural property of a country is the responsibility of the government. Before proceeding with a project, however, which prima facie entails the risk of damaging cultural property (e.g., any project that includes large scale excavations, movement of earth, surficial environmental changes or demolition), Bank staff must: (1) determine what is known about the cultural property aspects of the proposed project site. The government's attention should be drawn specifically to that aspect and appropriate agencies, NGOs or university departments should be consulted; (2) If there is any question of cultural property in the area, a brief reconnaissance survey should be undertaken in the field by a specialist. Procedures to be followed upon positive surveys are detailed in Chapter 6 of the technical paper.</p>	-

4.0 DIRECT & OFFSET MITIGATION & ADDITIONALITY

The following three tables provide a country-by-country summary of direct and offset mitigation measures and additionality for effects on critical natural habitat, natural habitat and cultural property.

Annex A, Definitions, no. 1. (d) of OP4.04 lists a number of mitigation measures that may be appropriate to remove or reduce adverse impacts on natural habitats or their functions to keep such impacts within socially defined limits of acceptable change.

specific measures depend upon the ecological characteristics of the given site' the following table provides examples of project mitigation measures that fall under the categories suggested in Annex A.

Table 4a Examples of Application of OP4.04 Listed Mitigation Measures

Mitigation	Examples
Project redesign	<u>Azerbaijan</u> : routed to pass through degraded area of potentially proposed Gobustan National Park; construction activities timed to avoid hibernation season for spur thighed tortoise; <u>Georgia</u> : re-routing to avoid Narianis Veli wetland in Ktsia-Tabatskuri Managed Reserve; restriction of RoW to Routed to avoid intact forest areas and pass through non forest areas or degraded forest blocks; avoidance of heavy construction activities during spring bird migratory period in Managed Reserve; <u>Turkey</u> : re-routed to avoid dense forest and now passes through lower quality sparse and patchy forested areas; seasonal constraints to minimise effects on bird and amphibian species.
Strategic habitat retention	<u>Azerbaijan</u> : maximised use of existing tracks in Gobustan area; <u>Georgia</u> : use of existing tracks and the Right of Way for construction access and prevention on new tracks in Ktsia-Tabatskuri Managed Reserve; re-instatement of favoured black grouse habitat; Construction and post-construction monitoring of forest plots adjacent to the RoW; <u>Turkey</u> : re-instatement of favoured black grouse habitat.
Restricted conversion or modification	<u>Azerbaijan</u> : restriction of width of RoW to 26 m facilitated by no stripping of topsoil except over the trench line in the Gobustan Cultural Reserve; pre-clearance surveys for important flora and fauna; <u>Georgia</u> : reduction of the RoW width through patches of high conservation value forests (to either 22m or 16m); No new access tracks without prior BTC Co. approval to reduce land take in sensitive areas; pre-clearance surveys for sensitive floral and faunal species; <u>Turkey</u> : restriction of RoW in Posof Wildlife Protection Area - to 8m for short section; elsewhere to 15 and 28m wide; pre-clearance surveys for sensitive floral and faunal species; maximal use of existing tracks and RoW for transport
Re-introduction of species	<u>Azerbaijan</u> : rare species management plans e.g. <i>Iris acutiloba</i> ; spur-thighed tortoise <u>Georgia</u> : rare species management plans e.g. fritillary; gentian; snowdrop; squill; <u>Turkey</u> : rare species management plans for 187 internationally or nationally notable plant species recorded within a 500m corridor
Mitigation measures to minimise the ecological damage	<u>Azerbaijan</u> : awareness training for construction staff; protection of water quality; dust suppression; <u>Georgia</u> : noise abatement; protection of water quality; dust suppression; awareness training for construction staff; hunting ban; <u>Turkey</u> : ecological supervision during construction; awareness training for construction staff; hunting ban.
Post development restoration works	<u>Azerbaijan</u> : re-instatement of project areas including site specific method statements; <u>Georgia</u> : re-instatement of project areas including site specific method

Mitigation	Examples
	statements; <u>Turkey</u> : re-instatement of project areas including site specific Special Area Re-instatement Method Statements (SARMs)
Restoration of degraded area	<u>Azerbaijan</u> : offset plan to manage and enhance degraded semi-desert habitat in Gobustan area; <u>Georgia</u> : Offset tree and shrub planting; <u>Turkey</u> : Offset tree and shrub planting
Establishment of ecologically similar protected of suitable size and contiguity	<u>Azerbaijan</u> : Strategic Environmental and Cultural Management Plan for the Gobustan area incorporating a potentially proposed National Park and Gobustan Cultural Heritage Reserve; capacity building for Ministry of Environment and Natural resources, Ministry of Culture & Institute of Archaeology <u>Georgia</u> : assistance to the Georgian government for management planning at Ktsia-Tabatskuri Managed Reserve; capacity building for Ministry of the Environment; State Department of Protected Areas and State Department of Forestry; <u>Turkey</u> : capacity building under training programmes implemented as part of the important Plant Areas (IPA) offset project.

Tables 4b – 4dc: Country specific summary of direct / offset mitigation measures and additionality

Table 4b: Azerbaijan

Critical natural habitat *	Direct Mitigation	Residual Impacts	Offset Mitigation	Additionality - EIP Programme
-	-	-	-	-
Natural habitat	Direct Mitigation	Residual Impacts	Offset Mitigation	Additionality - EIP Programme
<p>Gobustan Proposed National Park ?</p> <p>(NB.: status as proposed National Park being clarified)</p> <p>- semi-desert, includes Azerbaijan Red Data Book <i>Iris acutiloba</i> and spur thighed tortoise <i>Testudo graeca</i></p>	<p>Routed through degraded area</p> <p>Restriction of ROW width</p> <p>Site specific re-instatement plans</p> <p>Principle to maximise use of existing tracks</p> <p>Rare species programme - pre-construction surveys and management for rare species</p> <p>Construction activities timed to avoid hibernation season for spur thighed tortoise.</p> <p>Pre-clearance survey and clearance procedure in place for spur-thighed tortoise involving the Azerbaijan Institute of Zoology</p> <p>Awareness training for construction staff</p>	<p>Habitat loss: temporary & partial loss of sensitive habitat for approximately 10-12 years – High significance.</p> <p>Soil Erosion and Visual impact – Low significance.</p>	<p>Implementation of Strategic Environmental & Cultural Management Plan for Gobustan area. Involvement of international experts in conjunction with the Ministry of Environment and Natural resources, Ministry of Culture & Institute of Archaeology & other stakeholders (also for Gobustan Cultural Reserve).</p> <p>The Strategic Environmental and Cultural Management Plan will address rare species management e.g. <i>Iris acutiloba</i>, spur-thighed tortoise, with the aim of increasing the populations of the species in particular through sympathetic habitat management and improvement.</p> <p>Capacity building - involvement of Institute of Botany in re-instatement programme</p>	<p>Semi-desert pilot management scheme: habitat improvement / management for degraded semi-desert (in conjunction with funding provided by the upstream project)</p> <p>Awareness raising and education</p> <p>Capacity building - improved conservation management skills through involvement of national organisations</p> <p>Combined investment with the ongoing spur-thighed tortoise breeding and conservation programme instigated as part of the environmental investment activity by the upstream project.</p>

Tugai forest conservation and restoration, Kura floodplain	No impact - tugai forest not in project zone of influence	No impact	Offset not required	Pilot tugai forest management projects - creation of new areas; re -instatement of former forest areas (also funded under Regional Biodiversity Action Plan)
Cultural Property	Direct Mitigation	Residual Impacts	Offset Mitigation	Additionality - EIP Programme
Gobustan Cultural Heritage Reserve	<p>Routed close to Reserve boundary</p> <p>Distance across Reserve minimised</p> <p>Routed away from locations of known archaeological significance</p> <p>Route passes through disturbed area</p>	<p>No impact on site designation</p> <p>No impact on known artefacts</p>	Implementation of Strategic Environmental & Cultural Management Plan for Gobustan area. Involvement of international experts in conjunction with the Ministry of Environment and Natural resources, Ministry of Culture & Institute of Archaeology & other stakeholders (also for proposed Gobustan National Park)	-

Table 4c: Georgia

Critical natural habitat *	Direct Mitigation	Residual Impacts	Offset Mitigation	Additionality - EIP Programme
Ktsia-Tabatskuri Managed Reserve IUCN Red Data Book species: Black grouse <i>Tetrao mlokosiewiczii</i> (Data Deficient); Corncrake <i>Crex crex</i> (Vulnerable) Georgian Red Data Book species: Brown bear <i>Ursus arctos</i> ; Grey partridge <i>Perdix perdix</i>	Route revision to avoid key habitats Seasonal constraints Protection of water quality Site specific re-instatement Prohibition on construction of new roads Additional facilities only with BTC Co approval Construction and post-construction monitoring Noise abatement Awareness training for construction staff Hunting ban	No change in protected status Reduction in integrity of nationally and regionally important habitats – low significance Short term disruption to fauna – low significance	Assistance to government for management planning for Ktsia-Tabatskuri Managed Reserve	Planning and implementation as part of GEF Protected Areas Programme linkages Brown bear conservation management Black Grouse - habitat investigation, monitoring & conservation management
Natural Habitat	Direct Mitigation	Residual Impacts	Offset Mitigation	Additionality - EIP Programme

<p>Tetritskaro Primary Forest Fragments</p> <p>Including Georgian Red Data Book Pasqueflower <i>Pulsatilla georgica</i> and High mountainous oak <i>Quercus macranthera</i></p>	<p>Routed to avoid intact and primary forest areas</p> <p>Reduction of the ROW width</p> <p>No new access tracks without prior BTC Co. approval</p> <p>Trees to be felled rather than cleared</p> <p>Site specific re-instatement</p> <p>Pre-clearance survey for pasque flower and implementation of management</p> <p>Pre-clearance survey for high mountain oak to be marked and retained at edge of RoW</p> <p>Construction and post-construction monitoring of forest plots adjacent to the RoW</p> <p>Pre-clearance bear survey if construction to occurs in vicinity of bear habitat during hibernation period. Mitigation to be implemented if bears present.</p> <p>Maintenance of access across trench</p> <p>Noise abatement</p> <p>Protection of water quality</p>	<p>Reduction in integrity of nationally important habitats – Medium – High significance</p> <p>Impact on pasque flower – Medium significance</p>	<p>Eco-compensation Plan - Offset tree and shrub planting using native tree and shrub species / forest management (net increase in forest area). Meadows would provide suitable habitat for pasque flower.</p> <p>Rare Species Management Programme - increase in population for re-introduction</p>	<p>Sustainable forest management pilot project</p>
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	Dust suppression			
	Awareness training for construction staff			
	Hunting ban			
Tkhratskharo Pass – Tiseli Primary Forest Fragments / Alpine & Sub-alpine Meadows (Borjomi-Kharagauli National Park Support Zone) Including IUCN Red Data Book species: Black grouse <i>Tetrao mlokosiewiczii</i> (Data Deficient); Corncrake <i>Crex crex</i> (Vulnerable); Eurasian Lynx <i>Lynx lynx</i> (Near Threatened) Georgian Red Data Book species: Brown bear <i>Ursus arctos</i> Endemic species: Gentian <i>Gentiana angulosa</i> Squill <i>Scilla rosenii</i> Snowdrop <i>Galanthus caucasicus</i>	Routed to avoid forest as far as possible Reduction of the ROW width No new access tracks without prior BTC Co. approval Trees to be felled rather than cleared Site specific re-instatement Pre-clearance survey for pasque flower and implementation of management Pre-clearance survey for high mountain oak to be marked and retained at edge of RoW Construction and post-construction monitoring of forest plots adjacent to the RoW Pre-clearance bear survey if construction to occurs in vicinity of bear habitat during hibernation period. Mitigation to be implemented if bears present.	Reduction in integrity of regionally (in the country context) important habitats – Medium significance Disruption of behaviour or interactions of nationally important species – High significance	Implementation of Eco-compensation Plan - Offset tree and shrub planting using native tree and shrub species / forest management (net increase in forest area). Rare Species Management Planning - net increase in the population for re-introduction. Assistance to government in management planning for protected areas - contribute to sustainable management of key resources and habitats that are being crossed by the pipeline	Sustainable forest management pilot project

	Maintenance of access across trench Noise abatement Protection of water quality Dust suppression Awareness training for construction staff Hunting ban			
Mount Tavkvetili alpine wetland fragments KP 151-7	Micro-routing to avoid fragments Re-instatement Construction & post-construction monitoring Protection of water quality	Low significance	-	-
Cultural Property	Direct Mitigation	Residual Impacts	Offset Mitigation	Additionality - EIP Programme
-	-	-	-	-

Table 4d: Turkey

Critical natural habitat *	Direct Mitigation	Residual Impacts	Offset Mitigation	Additionality - EIP Programme
Posof Wildlife Protection Area Including IUCN Red Data Book species: Black grouse <i>Tetrao mlokosiewiczii</i> (Data Deficient)	Reduction of ROW to 8m in-part Special Area restrictions and reinstatement in Environmentally Sensitive Areas (ESAs) Avoidance of breeding season for black grouse	No degradation in status of protected area Flora, short term disturbance - moderate significance to internationally important flora; minor significance to nationally important flora Mammals - minor significance Breeding birds - minor/moderate significance depending upon timing of works Black grouse – moderate significance (with avoidance of breeding season) Amphibians - minor significance	Tree planting in non-project areas Implementation of Important Plant areas (IPA) Project	Black Grouse Management Plan
Sarikamis Natural Site Area	Special Area restrictions and reinstatement in ESA	No effect on protected status Flora, short term disturbance - moderate significance to internationally important flora; minor significance to nationally important flora Mammals - minor impact	Tree planting in non-project areas Implementation of Important Plant areas (IPA) Project	Habitat Enhancement in up to 2 forest areas in NE Anatolia

		Breeding birds - minor / moderate depending upon timing of works Amphibians - minor impact		
Natural Habitat	Direct Mitigation	Residual Impacts	Offset Mitigation	Additionality - EIP Programme
Miscellaneous semi-natural habitat with internationally & nationally rare plant species in project defined Environmentally Sensitive Areas (ESAs) – 187 internationally or nationally notable plant species recorded within a 500m corridor	RoW width reduced in selected sections Pre-construction surveys for rare species; Rare species management Site specific re-instatement plans Ecological supervision during construction Maximal use of existing tracks and RoW for transport Awareness training for construction staff Seasonal constraints	Flora, short term disturbance - moderate significance to internationally important flora; minor significance to nationally important flora	Implementation of Important Plant areas (IPA) Project Forests: Tree planting in non-project areas	-
Cultural Property	Direct Mitigation	Residual Impacts	Offset Mitigation	Additionality - EIP Programme
-	-	-	-	-

* Critical natural habitats are:


(i) existing protected areas and areas officially proposed by governments as protected areas (e.g., reserves that meet the criteria of the World Conservation Union [IUCN] classifications²), areas initially recognized as protected by traditional local communities (e.g., sacred groves), and sites that maintain conditions vital for the viability of these protected areas (as determined by the environmental assessment process³); or


(ii) sites identified on supplementary lists prepared by the World Bank or an authoritative source determined by IFC's Environment and Social Development Department. Such sites may include areas recognized by traditional local communities (e.g., sacred groves); areas with known high suitability for biodiversity conservation; and sites that are critical for rare, vulnerable, migratory, or endangered species⁴. Listings are based on systematic evaluations of such factors as species richness; the degree of endemism, rarity, and vulnerability of component species; representativeness; and integrity of ecosystem processes.

5.0 OFFSET PLANS

The following tables (Tables 5a – h) provide further detail on offset mitigation measures for each residual impact deemed to be of medium or high significance.

Table 5a

Country	Azerbaijan					
Issue	Proposed Gobustan National Park / Gobustan Cultural Heritage Reserve					
Safeguard Policy Designation	Critical Natural Habitat	?	Natural Habitat	0	Cultural heritage value	0
	<p>During ESIA preparation, the Reserves Department of the Ministry for Environment and Natural Resources stated that the horseshoe-shaped area (See Figure 1) near Gobustan is a proposed National Park. Later, the Expertise Department and some other representatives of the Ministry for Environment & Natural Resources stated that to their knowledge the area has never been officially proposed. The only evidence held by BTC Co. is an area sketched on a BTC map by the Reserves Department.</p> <p>Figure 1“Proposed” National Park” (Yellow Shaded Area)</p>  <p>Since it is currently unclear whether the area is officially proposed as a national park or not, it is also unclear if it should be defined as a “Critical” Natural Habitat under OP 4.04. Nevertheless, BTC will treat the area with the same due care and offset package as if it were officially listed. In fact, through the BTC project, it is hoped that the end result of offset and environmental investment initiatives will be to enhance the protection and people’s enjoyment of both the natural and cultural heritage of the Gobustan area by helping to strengthen the planning framework and investing in habitat conservation.</p>					
Detail of Issue	The Gobustan region has many interesting features and being located close to Baku has some tourism potential. The Cultural Reserve consists of historical					

<p>Impact</p>	<p>patches of pristine <i>Artemisia</i> desert with <i>Iris acutiloba</i> (Azerbaijan Red Data Book)</p> <p>9 km of the RoW crosses the “proposed” Gobustan National Park (i.e. between KP 19.5 and KP 28.5). The total area of the park would cover an area of ca. 178,000 ha. Given that the RoW will only be 26 m wide through this section, the area of park affected would cover approximately 234 ha or 0.13% of the “proposed” park area. Much of the land that will be disturbed by pipeline construction has already been degraded due to historical human activity including farmsteads, random vehicle tracks from uncontrolled access through a semi-desert area, waste fly-tipping and military use. Nevertheless, it is acknowledged that the area is home to sensitive fauna and flora, and the soils are easily eroded if not properly reinstated.</p> <p>Within the “proposed” national park, desert plant communities are sparsely distributed and typically develop slowly thus are particularly susceptible to disturbance (See Figure 2). It is anticipated that the flora will take up to twelve years to recover even with planned reinstatement measures, which incorporate an element of monitoring to identify whether refinements to the reinstatement strategy are necessary.</p> <p>Figure 2 Typical Plant Cover, “Proposed” Gobustan National Park</p> 

	<p>Gobustan Cultural Heritage Reserve (Figure 1 - Green Lined Area): Although the BTC pipeline route crosses the northeastern edge of the Reserve for 900 m it will have no impact upon any of the rock art that the Reserve is designated to protect. The “impact” on the cultural reserve is perceived, not real.</p> <p>Figure 3 Rock Art, Gobustan Cultural Reserve</p>
Direct Mitigation	<ul style="list-style-type: none"> - Routed through degraded area; - Restriction of width of ROW to 26 m facilitated by no stripping of topsoil except over the trench line; - Principle to maximise use of existing tracks; - Development of a Transport Management Plan; - Site specific re-instatement plan; - - Pre-construction surveys to identify locations and population sizes for rare species; - Rare species management including translocation of species such as <i>Iris acutiloba</i>. Awareness training for construction staff <p>BTC will seek assistance from the Institute of Botany (IoB). The objective is for the IoB to research and collect the best blend of seeds for successful recolonisation of the pipeline corridor. Monitoring and reporting on the seeding programme will provide valuable information to any organisation considering habitat improvement and conservation initiatives, including BTC, in other semi-desert habitats.</p>
Residual Impact	<ol style="list-style-type: none"> 1. Temporary and partial loss of sensitive habitat for approximately 10 - 12 years: High (as defined in the ESIA). <p>Considered to be of high significance because it will take over 10 years to reinstate, though the disturbance is a small percentage of the total habitat area.</p> <ol style="list-style-type: none"> 2. Soil erosion and visual impact: Low (as defined in the ESIA). <p>Considered to be of low significance due to the likelihood of occurrence being low, given planned reinstatement and monitoring activities.</p>
Offset Mitigation	<p>As a measure of offset for disturbing a sensitive habitat, BTC Co. wishes to sponsor the development of a Strategic Environmental & Cultural Management Plan for the Gobustan region in wide consultation with the Ministry of Culture, the Institute of Archaeology and the Ministry for Environment and Natural Resources as well as local people and all those with an interest in the management of the area.</p>

<p>Objective</p>	<p>Strategic Environmental & Cultural Management Plan for the Gobustan region.</p> <p>The World Heritage Convention places significant emphasis on areas with outstanding natural heritage and/or cultural heritage. Given the Government's ambition to achieve World Heritage Status for Gobustan Cultural Reserve, it is desirable that the remit and boundaries of the Reserve be extended to include natural habitats. The Plan should seek to manage Gobustan's natural and cultural heritage in a co-ordinated manner to improve land use planning controls and enhance the potential for sustainable tourism. A Strategic Environmental & Cultural Management Plan for the Gobustan region should therefore seek to:</p> <ul style="list-style-type: none"> • Assist the Ministry of Culture in its efforts to obtain recognition of Gobustan Cultural Reserve under the World Heritage Convention. • Incorporate natural heritage into the protective framework of the Gobustan Cultural Reserve/Proposed National Park. • Assist the Ministry for Environment and Natural Resources in fulfilling Azerbaijan's commitment to combat desertification. This is in accordance to the <i>International Convention on Desertification</i>, to which Azerbaijan is a signatory. • Establish an overall vision for the long-term future of the Gobustan area incorporating cultural and natural heritage, which is widely accepted. • Explore opportunities for positive management with landowners, herders and other stakeholders that would enhance the landscape character of the area whilst respecting economic interests. • Provide guidance and attract widespread support, which, in turn, should lead to an increased understanding, respect and care for this important cultural and natural landscape. • Increase potential for sustainable tourism. <p>The development of specific objectives and plans will, however, require close co-operation among the key stakeholders to avoid resource use conflicts.</p>
<p>Plan</p>	<p>A Strategic Environmental & Cultural Management Plan for Gobustan: The Ministry of Culture has been lobbying the European Union and other organisations to help Azerbaijan raise the profile of the GCR to World Heritage Status (WHS) under the <i>World Heritage Convention</i>. The Convention establishes criteria that qualify an area as having world heritage status based on its cultural and/or natural heritage characteristics.</p> <p>World Heritage Status would bring prestige to GCR but would not carry with it any additional statutory controls. Azerbaijan's ambitions for GCR are a key material factor that should be taken into account by the local authorities when making planning decisions. A Strategic Cultural Heritage Reserve Management Plan could not be prescriptive or binding on landowners and management agencies, but it would aim to set the framework for co-ordinated management and the development of partnerships. In this way, a Plan could enhance existing controls to protect the GCR and create new measures to protect important habitats. It would also serve to inform existing and future management documents relating to the area.</p>

	<p>The preparation of a Strategic Environmental & Cultural Management Plan for the entire GCR incorporating semi-desert habitats would represent a significant move forward in securing the future character and quality of the GCR landscape as a whole, which is locally cherished and now becoming internationally recognised. It would provide a framework for the holistic and proactive management of the landscape, helping to ensure that the special qualities of the area are sustained and preserved for future generations.</p> <p>Approach: The process of developing the Plan would involve a significant deal of research, survey and consultation. As part of this process, BTC Co. would employ experienced consultants and involve local specialists to undertake a review of archaeological assets and a landscape / habitat assessment, and consider potential for the development of the area for sustainable tourism. In addition, BTC Co. would assist with the development of a comprehensive database of all the cultural and environmental assets of the GCR and nearby habitats, held within a Geographical Information System (GIS). These projects would form the main building blocks of a Strategic Environmental & Cultural Management Plan.</p> <p>Plan Contents: It is envisaged that a Strategic Environmental & Cultural Management Plan would consist of a statement of the objectives necessary for the long-term preservation of the GCR and its landscape setting, aiming to balance the interests of conservation, public access, and the interests of those who live and work in the area.</p> <p>The objectives would be based on the identification of the values of the GCR, key management issues, and an assessment of why the area is sensitive and vulnerable to the pressures of both traditional and modern ways of life. A Plan would therefore need to consist of the following parts:</p> <p>Part One – an assessment of the natural and cultural values that make the Gobustan area special, including justification for the proposed inscription of Gobustan Cultural Reserve as a WHS site. .</p> <p>Part Two – descriptive information used in relation to management needs.</p> <p>Part Three – objectives for the management of the GCR based on a strategic view over thirty years, and medium term objectives for five to ten years. The strategy should be based on overall long-term objectives that would set the context for more detailed medium-term objectives.</p> <p>Part Four– outline of strategies and programme for action.</p> <p>A Plan would be specifically designed and formatted to foster its use as a working document, which could be updated on a regular basis.</p> <p>It is envisaged that in the first part of a Plan, the values of the GCR could be defined and described under the following headings:</p> <ul style="list-style-type: none"> • Archaeological and historical • Landscape and conservation • Social • Economic • Research and educational
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	<p>Part Four of a Plan would set out a detailed programme for action to achieve the management objectives in the short-medium term. The hope is that the Ministry of Culture and the Ministry for Environment and Natural Resources would then update this section in consultation with other stakeholders on a regular basis.</p>								
Timetable	<p>BTC Co. has already had several discussions on related topics with the Ministry of Culture, the Ministry of Environment and Natural Resources and the Institute of Archaeology and has identified a list of potential candidates to provide expert consultancy advice on Plan development.</p> <p>It is expected that work on drafting the Strategic Environmental & Cultural Management Plan would commence around mid-2003.</p> <p>First, it is expected that an international expert will need to consult with all key stakeholders over several weeks to establish the general scope and objectives of the Plan. A further period of two weeks would be required to identify potential synergies with semi-desert conservation projects to be identified under the EIP Request for Proposals. Proposals should be submitted to BTC Co. by mid-April and projects selected by the end-May 2003.</p> <p>By mid-June it should be possible to begin considering an effective planning framework for protecting Gobustan's natural and cultural values, which will also be required prior to implementing semi-desert conservation projects, and to draft a proposed ToC for the Plan.</p> <p>Acknowledging that it may take time for some stakeholders to reach a consensus about the contents of the Plan, and to delineate their roles and responsibilities for an effective planning framework, it is hoped that a draft document could be issued for comment by the third quarter of 2003, with a final draft of the Plan to be agreed by the end of the year. In reality the timeline could be longer.</p>								
Budget	<table> <tr> <td>Scoping the Plan:</td> <td>\$25,000</td> </tr> <tr> <td>GIS:</td> <td>\$10,000</td> </tr> <tr> <td>Developing the Plan:</td> <td>\$115,000*</td> </tr> <tr> <td>Additional offset</td> <td>\$125,000**</td> </tr> </table> <p>* Estimate only - actual budget subject to establishing the scope of the Plan. ** Activities to be defined by the Plan. These activities must be consistent with BTC's environmental and social policies and the requirements of OP 4.04.</p>	Scoping the Plan:	\$25,000	GIS:	\$10,000	Developing the Plan:	\$115,000*	Additional offset	\$125,000**
Scoping the Plan:	\$25,000								
GIS:	\$10,000								
Developing the Plan:	\$115,000*								
Additional offset	\$125,000**								

Table 5b

Country	Georgia				
Issue	Ktsia-Tabatskuri Managed Reserve				
Safeguard Policy Designation	Critical natural habitat	●	Natural Habitat		Cultural heritage value
	<p>The Ktsia-Tabatskuri Managed Reserve was defined in the 1996 protected areas legislation with temporary boundaries. There is no active conservation management on the site and it does not have a management plan. As such, the practical creation of the reserve, including a specific piece of legislation for its creation has not been implemented.</p> <p>The reserve is considered as ‘critical natural habitat’ under the OP4.04 definition.</p>				
Details of Issue	<ul style="list-style-type: none"> The Ktsia-Tabatskuri Managed Reserve covers 22,000 hectares and encompasses Lake Tabatskuri, Narianis Veli wetlands, Ktsia valley wetlands and high mountain meadow vegetation. The wetlands are used by migrating birds in the spring and autumn. The area is utilised for agricultural activities including grazing and hay cutting. Much of the territory is given out in long-term state leases to shepherds who bring large flocks of sheep from eastern Georgia. The Narianis Veli wetlands have a series of drainage channels and are cut for hay in the autumn by residents of nearby villages. There are a series of unsurfaced tracks in the area. The Reserve is not actively managed for nature conservation. IUCN Red Data Book species: <ul style="list-style-type: none"> Black grouse <i>Tetrao mlokosiewiczzi</i> (Data Deficient); Corncrake <i>Crex crex</i> (Vulnerable) Georgian Red Data Book species: <ul style="list-style-type: none"> Brown bear <i>Ursus arctos</i>; Grey partridge <i>Perdix perdix</i> 				
Impact	<ul style="list-style-type: none"> The route passes through Managed Reserve for 21.2km (KP 154+790 - KP176); The landtake amounts to 0.4% of the protected area; Short-term auditory and visual disturbance to fauna, potentially including migratory birds and bears depending upon the season; Effects on surface water resources e.g. Lake Tabatskuri, Ktsia River, potentially with associated effects on ecological resources due to: <ul style="list-style-type: none"> Release of suspended solids or contaminants during construction; Discharges of sanitary wastewater from block valve BV-GB16; Discharges of hydrotest water Contamination of soils and surface waters from spillages; Effects of fugitive dust on adjacent habitat. 				
Direct Mitigation	<ul style="list-style-type: none"> The route has been revised to avoid the Narianis Veli and Ktsia Valley wetlands; Seasonal constraint imposed on heavy construction activity in the vicinity of Narianis Veli wetland during the spring migratory period; Utilisation of existing tracks and the Right of Way for construction activities; No new access tracks or other facilities (e.g. borrow pits) without prior BTC Co. approval to reduce land take; Pre-clearance bear survey to be completed if construction to occur in the vicinity of bear habitat during the winter- early spring hibernation period. Action to be implemented if survey indicates hibernating bear presence in vicinity of RoW, may include bear monitoring programme Construction and post-construction migratory bird monitoring; Site specific re-instatement Method Statements allowing for re-instatement with suitable floral species to reflect endemic characteristics and overall habitat characteristics to maintain habitat continuity. 				

	<ul style="list-style-type: none"> • Installation of soft plugs in trench to allow crossing by wildlife. • Noise abatement to be employed and good practice to reduce noise disturbance – elimination of tonal, impulsive or low frequency noise through noise control engineering techniques where practicable (fitting of mufflers, damping, etc), and substitution for a different method if necessary (e.g. use of hydraulics in place of hammering actions). Selection of the most appropriate equipment for the task considering the lowest sound power level; equipment maintenance to reduce noise owing to mechanical faults; sympathetic operation; • Preferential river crossing construction during periods of low flow; • Continuity of water flow to be ensured through diversion of main river channel away from construction area; • Sediment control measures to be enforced, including the use of straw bales, silt fences and settlement lagoons depending on river characteristics and seasonal conditions • Prohibition of fuelling and other potentially contaminating operations within watercourse floodplain. • Provision of treatment facilities and enforcement of discharge standards for sewage discharges. • Selection of abstraction locations on the basis of the hydrological and ecological characteristics of the water body and compliance with criteria required to obtain an abstraction permit; • Hydrotest abstraction and discharge to be licensed. Abstraction and discharge locations to be selected on the basis of the hydrological and ecological characteristics of the water body and by complying with all the criteria required to obtain an abstraction permit so as not to impact hydrological balance of surface water features. • Strict fuelling and spill control procedures; • Dust suppression techniques to be implemented when working in dry soils or where construction activities generate airborne dust • Awareness training for construction staff • Ban on hunting by construction staff
Residual Impact	<ul style="list-style-type: none"> • Reduction on the integrity of nationally important habitat - Low • Reduction in integrity of regionally (in the country context) important habitats - Low • Disturbance of species behaviour discernable using standard techniques – Low
Offset Mitigation	Assistance to government for management planning for Ktsia-Tabatskuri Managed Reserve
Objective	<p>The main objective of the provision of assistance to the government for management planning is to contribute to sustainable management of key resources and habitats that are being crossed by the pipeline.</p> <p>The Ktsia-Tabatskuri Managed Reserve lacks a management plan and active conservation management. Without assistance from BTC Co it is unlikely that management planning for this area would be undertaken in the near future as it is not on the Protected Areas Program list for action nor was it identified as a priority area for biodiversity conservation in a recent workshop attended by in-country NGOs and Ministry personnel. As such, BTC's assistance in management planning will facilitate practical site designation and management and contribute to the protection and enhancement of ecological resources.</p> <p>Whilst the main focus of the assistance is likely to be the Ktsia-Tabatskuri Managed Reserve other areas of the Borjomi-Kharagauli National Park and Support Zone may also be considered.</p> <p>Managing planning assistance would seek to:</p> <ul style="list-style-type: none"> • Assist the appropriate government agency in management planning efforts for the Ktsia-Tabatskuri Managed Reserve; • Aid the government in the fulfilment of commitments in the protected

	<p>areas legislation;</p> <ul style="list-style-type: none"> • Build upon existing programmes and plans in Georgia; • Encourage collaboration with stakeholders to minimise resource use conflicts; • Make a significant contribution to the maintenance and enhancement of ecological assets; • Incorporate structured ecological management into the protective framework for the Ktsia-Tabatskuri Managed Reserve; • Act to raise awareness of management planning needs in the area that would foster an understanding and appreciation the natural resources of the area. • Undertake appropriate scientific studies to add to the overall understanding of the area.
Plan	<p>The Plan is under development and the approach being adopted to finalise the Plan is defined below:</p> <p>Consultation with Government Consultation with relevant experts on management planning is being undertaken to determine the most effective way of rendering assistance to the relevant government departments for management planning in Ktsia.</p> <p>Consultation with Other Stakeholders A Georgia Protected Areas Development Project (GPADP), which is financed by the Global Environment Facility, is in the early stages of implementation. The GPADP renders assistance to the State Department for Protected Areas in protected areas management and planning. BTC Co has been involved in discussions with the programme leaders and attended a workshop on programme implementation in an effort to understand existing assistance to the government in protected areas planning</p> <p>Consultation is also in progress with other stakeholders active in protected areas planning and management in Georgia who are to investigate the avenues for implementing the protected areas assistance. For instance, the Department of Protected Areas has a Memorandum of Understanding for cooperation and support with the United States National Parks Department. Issues of discussion include the legal framework, the challenges of management planning for Category IV reserves, the eventual management plan implementation responsibilities, etc.</p> <p>Implementation of Assistance</p> <p>The implementation of assistance will be dependent upon the outcomes of the above two activities.</p> <p>Support may be provided for:</p> <ul style="list-style-type: none"> • Collation of existing survey data; • Potential collection of additional survey data to address data gaps; • Development of site database to list the environmental resources; • Evaluation of site resources; • Consultation with government entities and other stakeholders; • Liaison with stakeholders local to the site; • Development of management objectives for the site both short and longer term; • Identification of management actions required to meet objectives; • Identification of management plan implementation responsibilities; • Schedule for implementation of management actions; • Production of site monitoring regime; • Identification of programme and budget for action.
Timetable	<p>The timetable for implementation of assistance will depend on the type of assistance provided, which will be determined through consultation as</p>

	<p>described above. The schedule is as follows:</p> <p>Consultation with Government: April / June 2003 Consultation with Other Stakeholders: March – June 2003 Strategy Developed: August 2003</p>
Budget	<p>\$200,000</p> <p>Options are being investigated to leverage additional funding. This may be through a number of mechanisms:</p> <ul style="list-style-type: none"> • Involvement with existing programmes such as the Georgia Protected Areas Development Programme or the Forestry Development Programme; • Working with partners who have been involved in other initiatives e.g. GEF; KfW; WWF; both involved in schemes for the Borjomi-Kharagauli National Park. • Engaging new partners.

Table 5c

Country	Georgia					
Issue	Tetritskaro Primary Forest Fragments (KPs 84 – 92)					
Safeguard Policy Designation	Critical natural habitat		Natural Habitat	●	Cultural heritage value	
	The majority of the relatively limited forest areas that would be affected by the pipeline are of secondary origin and / or are heavily degraded by human activity including logging and grazing. Some fragments are considered as primary forest and meet the OP4.04 definition of ‘natural habitat’.					
Details of Issue	<p>Small areas of primary forest fragments interspersed with meadow crossed by the pipeline RoW. The primary forest fragments comprise the following:</p> <ul style="list-style-type: none"> • 130m of primary Georgian oak forest with a mixture of high-mountainous oak (KP 84+630 - 84+760); • 80m of beechwood (KP 85+620 - 85+700); • 1,020m of high-mountainous oak-Caucasian hornbeam forest (KP 86+230 – 87+250); • 250m of high-mountainous oak-Caucasian hornbeam forest (KP 90+750 – 91); • 130m beechwood (KP 91+040 – 91+170). <p>Areas of secondary forest of high ecological quality are:</p> <ul style="list-style-type: none"> • 80m of fragment of riparian forest (KP 84+780 - 84+860); • 490m of park-like high-mountainous oak forest (KP 92+510 – 93); • 500m of park-like high-mountainous oak forest (KP 93+190 - 93+690) <p>Georgian Red Data Book species:</p> <ul style="list-style-type: none"> - Pasque Flower <i>Pulsatilla georgica</i> - in meadows - High mountain oak <i>Quercus macranthera</i> - Brown bear <i>Ursus arctos</i> (Also KPs 180.6-183.3: Tsikisjvari forest; KP 185.2-197: Kodiana; KPs 157-160: Narianis Veli; KPs 172-175.5: R. Ktsia upper reaches); <p>Since they are located in close proximity to settlements, the forest communities are heavily impacted by human activity – grazing and logging and tree cutting for firewood. The regeneration rate is very low.</p>					
Impact	<ul style="list-style-type: none"> - Direct habitat loss of forest and high mountain meadows within RoW; - Habitat fragmentation and isolation; - Effects on populations of RDB plants; - Short-term auditory and visual disturbance to fauna, potentially including bears depending upon the season; - Effects on surface water resources e.g. Chiv-Chavi potentially with associated effects on ecological resources due to: - release of suspended solids or contaminants during crossing construction; - discharges of sanitary wastewater from check valve construction sites CV GC07 & pipe storage yard; - discharges of hydrotest water - Contamination of soils and surface waters from spillages; - Effects of fugitive dust on adjacent habitat. 					
Direct Mitigation	<ul style="list-style-type: none"> - Routed to avoid intact forest areas – as far as possible the route passes through non forest areas or degraded forest blocks; - Reduction of the ROW width through patches of high conservation value forests (to either 22m or 16m); - No new access tracks without prior BTC Co. approval to reduce land take in sensitive areas; - Trees to be felled to reduce damage to adjacent areas of forest; - Site specific re-instatement Method Statements allowing for re-instatement with suitable floral species to reflect endemic characteristics and overall 					

	<p>habitat characteristics to maintain habitat continuity. Re-instatement of RoW includes planting with shrubs and non-deep rooted trees (to maintain pipeline integrity);</p> <ul style="list-style-type: none"> - Pre-clearance survey to identify locations and population size of pasque flower. Implementation of Rare Species Management Planning involving translocation of individuals from the RoW and maintenance <i>ex-situ</i> for re-introduction during re-instatement; - Pre-clearance survey to identify individuals of high mountain oak to be marked and retained at edge of RoW where possible; - Construction and post-construction monitoring of forest plots adjacent to the RoW; - Pre-clearance bear survey to be completed if construction to occur during in the vicinity of bear habitat during the winter- early spring hibernation period. Action to be implemented if survey indicates hibernating bear presence in vicinity of RoW, may include bear monitoring programme; - Installation of soft plugs in trench to allow crossing by wildlife. - Noise abatement to be employed and good practice to reduce noise disturbance – elimination of tonal, impulsive or low frequency noise through noise control engineering techniques where practicable (fitting of mufflers, damping, etc), and substitution for a different method if necessary (e.g. use of hydraulics in place of hammering actions). Selection of the most appropriate equipment for the task considering the lowest sound power level; equipment maintenance to reduce noise owing to mechanical faults; sympathetic operation; - Preferential river crossing construction during periods of low flow; - Continuity of water flow to be ensured through diversion of main river channel away from construction area; - Sediment control measures to be enforced, including the use of straw bales, silt fences and settlement lagoons depending on river characteristics and seasonal conditions - Prohibition of fuelling and other potentially contaminating operations within watercourse floodplain. - Provision of treatment facilities and enforcement of discharge standards for sewage discharges. - Selection of abstraction locations on the basis of the hydrological and ecological characteristics of the water body and compliance with criteria required to obtain an abstraction permit; - No hydrotest discharges or abstractions will be made to / from lake Cherepanovka; - Strict fuelling and spill control procedures; - Dust suppression techniques to be implemented when working in dry soils or where construction activities generate airborne dust - Awareness training for construction staff - Ban on hunting by construction staff
Residual Impact	Reduction in integrity of nationally important habitats – Medium - High Impact on pasque flower – Medium
Offset Mitigation	Implementation of Eco-compensation Plan. Rare Species Management Planning
Objective	<p>Eco-compensation Plan The objective of the Eco-compensation Plan is to achieve a net increase in forest habitat of locally indigenous species.</p> <p>Rare Species Management Programme The objective of rare species management planning is to maintain individuals of pasque flower removed from the RoW in a healthy state and to achieve a net increase in the population for re-introduction.</p>
Plan	<p>Eco-compensation Plan The Eco-compensation programme will be implemented by BTC Co to create forest habitat off project areas. The forest area to be created will be equivalent to that which would be removed during RoW clearance. The Plan will allow for creation of new forest areas and also consider the sympathetic management of</p>

	<p>degraded areas to re-establish forest habitat.</p> <p>For compensation planting use will be made of trees that are existing components of the local flora and specifically:</p> <p>Georgian oak <i>Quercus iberica</i>, high-mountain oak <i>Quercus macrathera</i>, hornbeam <i>Carpinus caucasica</i>, oriental hornbeam <i>Carpinus orientalis</i>, pear <i>Pyrus caucasica</i>, willow <i>Salix alba</i>, beech <i>Fagus orientalis</i>, field maple <i>Acer campestre</i> ash <i>Fraxinus excelsior</i>.</p> <p>The Plan would allow for the creation of habitats favoured by rare species such as bear and would be suitable for pasque flower. In addition, high mountain oak would be one of the species planted.</p> <p>The Plan will be developed in consultation with the State Department of Forestry (SDF). In this manner the Plan can be linked to ongoing SDF initiatives. Discussions are to be held with SDF to define the following:</p> <ul style="list-style-type: none"> - Location for planting / management; - Species; - Species mix and proportions - Long-term management <p>Rare Species Management Programme</p> <p>There will be a two-pronged approach to rare floral species management in an effort to ensure a good survival and propagation rate. Where possible, live plants will be removed from the Right of Way and translocated to nearby botanical conservation centres. The translocation of rare plants to a natural habitat analogous to that to be lost due to construction was not considered practical as the maintenance and monitoring of plant-environment interaction would be time-consuming and dependant on conditions that could not be controlled. This methodology could not guarantee survival of translocated plants and could cause disturbance to natural habitat adjacent to the pipeline RoW. As the translocation of plants is always associated with high risk, seed propagation will be used as well in order to increase chances of success and propagate enough seedlings for consequent reintroduction.</p> <p>Seed collection from Fritillary will not be possible, as the RoW clearance will take places prior to seed production. As such, seeds will be collected from neighbouring populations.</p> <p>Once the construction of the pipeline is finished, translocated plants and those grown from seeds will be reintroduced in their wild habitat to restore the wild populations existing prior to RoW clearance. Replanting on the RoW and maintenance on the RoW will be done by the construction contractor, as part of their reinstatement obligations.</p>
Timetable	<p>Eco-compensation Plan</p> <p>Development of Plan in discussion with SDF: April – August 2003; Establishment of nurseries to provide stock for planting scheme, to be undertaken in conjunction with construction contractor: May – November 2003; Plan implementation when stock is of appropriate age for transplanting.</p> <p>Rare Species Management Programme</p> <p>A Scope of Work has been developed to determine the optimum management for pasque flower and implement the programme. The contract has been let to a qualified organisations . Removal of plants from the RoW will be completed at an appropriate time in respect of the life history of the species and prior to RoW clearance. Seeds will be collected in June / July 2003 and plants in July 2003.</p>
Budget	<p>Eco-compensation Plan</p> <p>Up to \$1,000,000</p> <p>This budget is shared with eco-compensation for the Tkhratskharo – Sakire area.</p>

	<p>Rare Species Programme Up to \$100,000</p> <p>(This covers management for the 3 RDB species and the 3 endemic species along the whole of the RoW)</p> <p>Options are being investigated to leverage additional funding. This may be through a number of mechanisms:</p> <ul style="list-style-type: none"> - Involvement with existing programmes such as the Forestry Development Programme; - Engaging new partners.
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Table 5d

Country	Georgia					
Issue	Tskhratskharo Pass – Tiseli Primary Forest / Alpine & Sub-alpine Meadows					
Safeguard Policy Designation	Critical natural habitat		Natural Habitat	❖	Cultural heritage value	
	The majority of the relatively limited forest areas that would be affected by the pipeline are of secondary origin and / or are heavily degraded by human activity including logging and grazing. Some fragments are considered as primary forest. The forest areas are interspersed with areas of diverse high mountain meadows. The forests and meadows meet the OP4.04 definition of 'natural habitat'.					
Details of Issue	<p>Small areas of primary forest fragments interspersed with high mountain meadow crossed by the pipeline RoW in Tskhratskharo Pass – Tiseli area:</p> <p>Tskhratskaro-Kodiana (KP 176-195): Primary Forest (medium – high conservation value):</p> <ul style="list-style-type: none"> • 1215m Thinned Pine Forest with High-Mountain Maple (KP 180+190 - 181+405) • 80m Thinned Pine Forest (KP 181+680 - 181+760) • 1340m Pine Forest (KP 181+760 - 183+100) • 250m Thinned Pine Forest (KP 183+750 – 184) <p>Secondary forests of high conservation value:</p> <ul style="list-style-type: none"> • 650m of beech forest with pine (KP 183+100 – 183+750) • 1130m of beech forest with pine (KP 186+160 – 187+290) • 2710m of beech forest with pine (KP 187+290 – 190) <p>Sakire – Tiseli (KP 195 – 208) Primary Forest (high conservation value):</p> <ul style="list-style-type: none"> • 300m of spruce forest (KP 195+360 – 195+660) • 150m of spruce forest (KP 196 – 196+150) • 150m of spruce forest (KP 201 – 201+150) • 120m of spruce – fir forest (KP 204 – 204+120) <p>Degraded forests of medium – high conservation value:</p> <ul style="list-style-type: none"> • 200m thinned spruce - pine forest (KP 195+095 - 195+295) • 50m thinned spruce forest (KP 197+125 - 197+175) • 250m thinned spruce forest (KP 199+750 – 200) • 450m thinned spruce – fir forest (KP 203+550 – 204) • 100m fragment of high-mountainous oak forest (KP 207+160 – 207+260) • 100m fragment of high-mountainous oak forest (KP 207+400 – 207+500) <p>The forest fragments are subjected to illegal logging and smaller scale collection of timber for firewood by the local communities scattered throughout the area. There are also reports of illegal poaching. The forests in proximity to villages are subject to grazing.</p> <p>Meadows:</p> <ul style="list-style-type: none"> • 4190m of grazed hay meadow (KP 176 – 180+190) • 2160m alpine meadow (KP 184 – 186+160) • 5000m alpine meadow (KP 190 – 195) • 360m alpine meadow (KP 195 – 195+360) • 975m alpine meadow (KP 196+150 – 197+125) • 850m alpine meadow (KP 197+150 – 198) <p>The area lies within the non-designated Support Zone for the Borjomi-Kharagauli National Park. The route passes through Support Zone for 39km (KP 176 – 215). The Support Zone extends to 170,846 hectares. As such the proportion of the</p>					


	<p>32m BTC RoW within the Support Zone amounts to 0.075%.</p> <p>IUCN Red Data Book species:</p> <ul style="list-style-type: none"> • Black grouse <i>Tetrao mlokosiewiczii</i> (Data Deficient) – noted at: <ul style="list-style-type: none"> - KP 180.6 – 183.3 Tsikisjvari forest - KP 185.2 – 197 Kodiana - (Also at KP 151 – 157 Mount Tavkvetili) • Corncrake <i>Crex crex</i> (Vulnerable) – around: <ul style="list-style-type: none"> - KP 180.6 – 183.3 Tsikisjvari forest - KP 185.2 – 197 Kodiana • Eurasian Lynx <i>Lynx lynx</i> (Near Threatened) – in forest areas around: <ul style="list-style-type: none"> - KP 180.6 – 183.3 Tsikisjvari forest - KP 185.2 – 197 Kodiana - <p>Georgian Red Data Book species:</p> <ul style="list-style-type: none"> • Brown bear <i>Ursus arctos</i> - habitat found in: <ul style="list-style-type: none"> - KPs 180.6-183.3: Tsikisjvari forest - KP 185.2-197: Kodiana - (Also at: KPs 84-92: Tetrtskaro forest; KPs 157-160: Narianis Veli; KPs 172-175.5: R. Ktsia upper reaches) - <p>Endemic species:</p> <ul style="list-style-type: none"> • Gentian <i>Gentiana angulosa</i>. An abundant population recorded in an alpine meadow at Kodiana Pass (KP 191). • Squill <i>Scilla rosenii</i>. Found at Tskratkaro and Kodiana passes (KPs 175, 191). • Snowdrop <i>Galanthus caucasicus</i>. A small population was found in a thinned pine forest with high-mountainous maple on Kodiana Pass (KP 191). The species is proposed for inclusion in a new edition of the Georgian Red Data Book.
Impact	<p>Direct habitat loss of forest and high mountain meadows within RoW;</p> <ul style="list-style-type: none"> • Habitat fragmentation and isolation; • Short-term auditory and visual disturbance to fauna, potentially including bears depending upon the season; • Effects on surface water resources potentially with associated effects on ecological resources due to: <ul style="list-style-type: none"> • release of suspended solids or contaminants during crossing construction; • discharges of sanitary wastewater from block valve and check valve construction sites BV-GB17; GC 18 & BV-GB19; BV-GB20 and BV-GB21; • discharges of hydrotest water • Contamination of soils and surface waters from spillages; • <u>Effects of fugitive dust on adjacent habitat.</u>
Direct Mitigation	<ul style="list-style-type: none"> • Routed to avoid intact forest areas – as far as possible the route passes through non forest areas or degraded forest blocks; • Reduction of the ROW width through patches of high conservation value forests (to either 22m or 16m); • No new access tracks without prior BTC Co. approval to reduce land take in sensitive areas; • Trees to be felled to reduce damage to adjacent areas of forest; • Site specific re-instatement Method Statements allowing for re-instatement with suitable floral species to reflect endemic characteristics and overall habitat characteristics to maintain habitat continuity. Re-instatement of RoW includes planting with shrubs and non-deep rooted trees (to maintain pipeline integrity); • Construction and post-construction monitoring of forest plots adjacent to the RoW; • Solitary individuals of rowan <i>Sorbus caucasigena</i>, high-mountain maple <i>Acer trautvetteri</i> and birch <i>Betula litwinowii</i> are to be marked to avoid damage to them as they are important components of crook-stem forest communities in the Tkhratskhara-Kodiana area;

	<ul style="list-style-type: none"> • Pre-clearance bear survey to be completed if construction to occur during in the vicinity of bear habitat during the winter- early spring hibernation period. Action to be implemented if survey indicates hibernating bear presence in vicinity of RoW, may include bear monitoring programme; • Installation of soft plugs in trench to allow crossing by wildlife. • Noise abatement to be employed and good practice to reduce noise disturbance – elimination of tonal, impulsive or low frequency noise through noise control engineering techniques where practicable (fitting of mufflers, damping, etc), and substitution for a different method if necessary (e.g. use of hydraulics in place of hammering actions). Selection of the most appropriate equipment for the task considering the lowest sound power level; equipment maintenance to reduce noise owing to mechanical faults; sympathetic operation; • Preferential river crossing construction during periods of low flow; • Continuity of water flow to be ensured through diversion of main river channel away from construction area; • Sediment control measures to be enforced, including the use of straw bales, silt fences and settlement lagoons depending on river characteristics and seasonal conditions • Prohibition of fuelling and other potentially contaminating operations within watercourse floodplain. • Provision of treatment facilities and enforcement of discharge standards for sewage discharges. • Selection of abstraction locations on the basis of the hydrological and ecological characteristics of the water body and compliance with criteria required to obtain an abstraction permit; • Hydrotest abstraction and discharge to be licensed. Abstraction and discharge locations to be selected on the basis of the hydrological and ecological characteristics of the water body and by complying with all the criteria required to obtain an abstraction permit so as not to impact hydrological balance of surface water features. • Strict fuelling and spill control procedures; • Dust suppression techniques to be implemented when working in dry soils or where construction activities generate airborne dust • Awareness training for construction staff • Ban on hunting by construction staff
Residual Impact	<ul style="list-style-type: none"> • Reduction in integrity of regionally (in the country context) important habitats – Medium • Disruption of behaviour or interactions of nationally important species - High
Offset Mitigation	<ul style="list-style-type: none"> • Implementation of Eco-compensation Plan. • Rare Species Management Planning • Assistance to government in management planning for protected areas
Objective	<p>Eco-compensation Plan The objective of the Eco-compensation Plan is to achieve a net increase in forest habitat of locally indigenous species.</p> <p>Rare Species Management Programme The objective of rare species management planning is to maintain populations of rare species removed from the RoW in a healthy state and to achieve a net increase in the population for re-introduction.</p> <p>Management Planning Assistance The main objective of the provision of assistance to the government for management planning is to contribute to sustainable management of key resources and habitats that are being crossed by the pipeline.</p>
Plan	<p>Eco-compensation Plan The Eco-compensation programme will be implemented by BTC Co to create forest habitat off project areas. The forest area to be created will be equivalent to that which would be removed during RoW clearance. The Plan will allow for creation of new forest areas and also consider the sympathetic management of</p>

	<p>degraded areas to re-establish forest habitat.</p> <p>For compensation planting use will be made of trees that are existing components of the local flora and specifically:</p> <p>Pine <i>Pinus sylvestris</i>, spruce <i>Picea orientalis</i>, spruce <i>Abies nordmanniana</i>, birch <i>Betula litwinowii</i>, rowan <i>Sorbus caucasigena</i>, high-mountain oak <i>Quercus iberica</i>, hornbeam <i>Carpinus caucasica</i>, pear <i>Pyrus caucasica</i>, willow <i>Salix alba</i>, beech <i>Fagus orientalis</i>, high-mountain maple <i>Acer trautvetteri</i>, ash <i>Fraxinus excelsior</i>.</p> <p>The Plan would allow for the creation of habitats favoured by rare and endemic species such as bear, lynx, corncrake and floral species</p> <p>The Plan will be developed in consultation with the State Department of Forestry (SDF). In this manner the Plan can be linked to ongoing SDF initiatives. Discussions are to be held with SDF to define the following:</p> <ul style="list-style-type: none"> - Location for planting / management; - Species; - Species mix and proportions; - Long-term management <p>Rare Species Management Programme</p> <p>The specific details of the programme are under discussions with local specialists and the construction contractor. The options are to:</p> <ul style="list-style-type: none"> - Translocation to Bakuriani botanic garden - <ul style="list-style-type: none"> - bulbs of <i>Scilla rosenii</i> and <i>Galanthus caucasicus</i> - individuals of <i>Gentiana angulosa</i>; - Maintain the populations on an undisturbed area adjacent to the RoW; - A combination of the above. <p>There will be a two-pronged approach to rare floral species management in an effort to ensure a good survival and propagation rate. Where possible, live plants will be removed from the Right of Way and translocated to nearby botanical conservation centres. The translocation of rare plants to a natural habitat analogous to that to be lost due to construction was not considered practical as the maintenance and monitoring of plant-environment interaction would be time-consuming and dependant on conditions that could not be controlled. This methodology could not guarantee survival of translocated plants and could cause disturbance to natural habitat adjacent to the pipeline RoW. As the translocation of plants is always associated with high risk, seed propagation will be used as well in order to increase chances of success and propagate enough seedlings for consequent reintroduction.</p> <p>Seed collection from Squill, Snowdrop and Gentian will not be possible, as the RoW clearance will take places prior to seed production. As such, seeds will be collected from neighbouring populations.</p> <p>Once the construction of the pipeline is finished, translocated plants and those grown from seeds will be reintroduced in their wild habitat to restore the wild populations existing prior to RoW clearance. Replanting on the RoW and maintenance on the RoW will be done by the construction contractor, as part of their reinstatement obligations.</p> <p>Management Planning Assistance</p> <p>Consultation with relevant experts on management planning is being undertaken to determine the most effective way of rendering assistance to the relevant government departments. This includes the Georgia Protected Areas Programme, which is financed by the Global Environment Facility and is currently rendering assistance to the State Department for Protected Areas in protected areas management and planning.</p> <p>Whilst the main focus of the assistance is likely to be the Ktsia-Tabatskuri Managed Reserve other areas of the Borjomi-Kharagauli National Park and Support Zone may also be considered. See Table 4b.</p>
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Timetable	<p>Eco-compensation Plan Development of Plan in discussion with SDF: April – August 2003; Establishment of nurseries to provide stock for planting scheme, to be undertaken in conjunction with construction contractor: May – November 2003; Plan implementation when stock is of appropriate age for transplanting.</p> <p>Rare Species Management Programme A Scope of Work has been developed to determine the optimum management for the three endemic species and implement the programme. The contract is has been let to a qualified organisations. Removal of plants / bulbs from the RoW will be completed at an appropriate time in respect of the life history of the species and prior to RoW clearance. Plants will be collected in May 2003.</p> <p>Seeds will be collected in accordance with the following schedule: Squill: June / July 2003 Gentian: July 2003 Snowdrop: July 2003</p> <p>Management Planning Assistance Timetable for implementation of management planning assistance will depend on the type of assistance provided, which will be determined through consultation as described above. BTC Co. expects to have a plan of action developed by July 2003. See Table 4b.</p>
Budget	<p>Eco-compensation Plan Up to \$1,000,000</p> <p>This budget is shared with eco-compensation for the Tetrtskaro area.</p> <p>Rare Species Programme Up to \$100,000</p> <p>(This covers management for the 3 RDB species and the 3 endemic species along the whole of the RoW)</p> <p>Management Planning Assistance Budget included under Ktsia-Tabatskuri Managed Reserve (Table 4b)</p> <p>Options are being investigated to leverage additional funding. This may be through a number of mechanisms:</p> <ul style="list-style-type: none"> - Involvement with existing programmes such as the Georgia Protected Areas Programme or the Forestry Development Programme; - Working with partners who have been involved in other initiatives e.g. KfW; WWF, both involved in schemes for the Borjomi -Kharagauli National Park; - Engaging new partners.

Table 5e


Country	Turkey				
Issue	Posof Wildlife Protection Area				
Safeguard Policy Designation	Critical natural habitat	●	Natural Habitat		Cultural heritage value
	As a protected area the Posof site is considered as Critical Natural Habitat				
Detail of Issue	<ul style="list-style-type: none"> The pipeline route crosses through Posof Wildlife Protection Area between KP 0 to KP 25.3. The Wildlife Protection Area covers 43,374 hectares on the Georgian border and extends as far south as the Yalnizcam mountains. The Protection Area was established primarily for the Caucasian Black Grouse <i>Tetrao mlokosiewiczi</i>, a globally-threatened species classified as Data Deficient and also a restricted range species. The grouse are found at higher elevations in the Caucasus and in the extreme north-eastern part of Turkey. The mixture of Scot's pine forest, forest edge and sub-alpine meadow with rhododendron is the critical habitat for Caucasian black grouse, which breeds in this area between April and July (inclusive). The species is under threat because of a decline in sub-alpine meadow areas. This is primarily due to over-grazing by sheep and goats but deforestation and excessive hunting are contributing factors. 2.7 km of the route pass through forest dominated by Scots Pine. The Posof Wildlife Protection Area and the surrounding meadows are important for large mammals including Wild Goat (globally-threatened), Brown Bear, Grey Wolf, Eurasian Lynx and Roe Deer. Smaller mammals include Bechstein's Bat, Mediterranean Horseshoe Bat (both globally-threatened), Common Pipistrelle, Greater Mouse-eared Bat, Weasel, European Pine Marten, Beech Marten and Eurasian Badger Three globally-threatened plant species (<i>Gypsophila simulatrix</i>, <i>Lathyrus karsianus</i>, <i>Allium sosnowskyanum</i>) and one nationally-threatened (<i>Acer divergens</i>) were noted in a 250m corridor either side of the route centre line from KP 10.3 to KP15.3. The forest holds Turkey's other restricted range species, Mountain Chiffchaff, and another warbler present only in the extreme north-east of Turkey, Green Warbler. Four globally-threatened amphibian species are located within the Posof Wildlife Protection Area: Caucasian Salamander and the Caucasian Parsley Frog (both of which are limited to the temperate mixed broadleaf forests of the north-east), Southern Crested Newt and the Tree Frog. 				
					

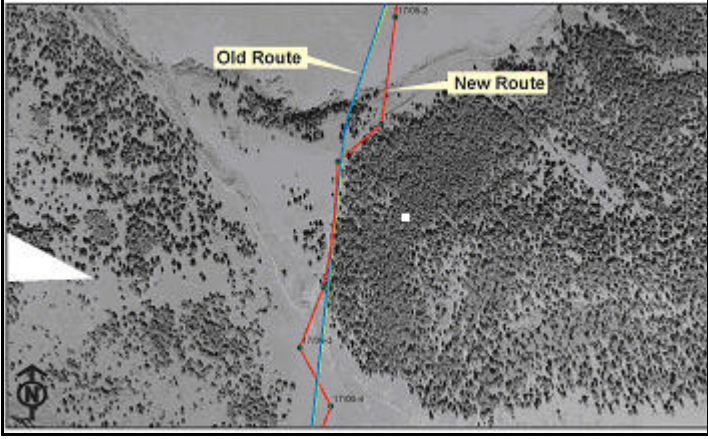
<p>Impact</p>	<p><i>Construction Phase Impacts</i></p> <ul style="list-style-type: none"> • The route passes through Wildlife Protection Area for 25.3km; • Taking account of the restricted RoW width (8m for a length 300m; 15m for a length of 75m, 22m for 540m and 28m for a length of 300m) with the remaining xxm at a width of xxm, the landtake amounts to 0.4% of the protected area; • Habitat destruction of forest and subalpine meadow may result in the loss of individuals from populations of globally-threatened plants; • Minor temporary disturbance to globally-threatened mammals during seasonal sensitivities e.g. hibernation and peak spring feeding periods for brown bears (November - April and March - June, respectively); breeding season for wild goats (October– December) and during birthing (March – April); breeding and hibernation periods for globally-threatened bat species, from September to May and for the Common Pipistrelle bat between October and July; • Direct disturbance to birds during nesting, feeding or indirectly, through habitat loss if construction is undertaken during the breeding season (ie between April and July inclusive). This would be most important for Caucasian Black Grouse in the forests and Dipper, particularly along the Posof River; • Temporary local disturbance to globally-threatened amphibian species during the spawning season between May and June inclusive; • Damage to adjacent habitat and species due to the incursion of machinery / personnel into nearby sites not directly required for construction purposes; • Other disturbance to adjacent habitats and species during construction activities; • Risk of introduction of plant diseases brought in from other areas on vehicles and equipment used in the construction; • Compaction of top and subsoils from machinery when reinstating the ESA to levels that may retard plant growth and kill soil microorganisms and bacteria; • Effects of fugitive dust on adjacent habitat. <p><i>Operational Phase Impacts</i></p> <ul style="list-style-type: none"> • Potential impact to flora due to enhanced access for logging
<p>Direct Mitigation</p>	<ul style="list-style-type: none"> • The pipeline has been re-routed to avoid dense forest and now passes through lower quality sparse and patchy forested areas; • The RoW will be narrowed to 8m for c. 300m of the route in Posof Wildlife Protection Area. Elsewhere the RoW will be between 15 and 28m wide. The RoW will be 15m wide for a length of c. 75m, 22m wide for c. 540m and 28m for c.300m of the route; • Pipe to be pushed or pulled through these areas where the Row is 8m; • Bearing in mind safety issues, construction to be planned to achieve a 21-day period from the time when the area is entered to the completion of reinstatement; • The pipeline has been re-routed to avoid dense forest and significant habitat fragmentation will be avoided; • Mitigation in line with the requirements of the Ministry of Forestry as follows: <i>“avoid disturbing the areas found within the site, where the wild animals drink water, during the excavation works and if disturbed provide new areas for drinking water close to the site. transport the soil excavated during trenching along the route to a place which will not harm wild animals”</i> • Ensure that the noise and the pollution affect on the wild animals will

	<p>be minimum during the activities”.</p> <ul style="list-style-type: none"> • All construction personnel will be briefed on environmental sensitivities in the surrounding area; • Threatened plant species to be identified and located during pre-construction surveys. The feasibility of translocating species will be assessed prior to construction. Where only a few individuals occur, these will be translocated outside of the RoW if the same habitat exists and if this is possible. Otherwise other techniques to be used e.g. nurturing of turves containing the threatened plants and replace during reinstatement; • Reinstatement to maintain habitat continuity as far as is practicable within the scope of Reinstatement Plan - revegetation strategy in all sections of the RoW will be to reinstate the pre-construction vegetation in terms of both composition and density. Site specific re-instatement Method Statements; • Care in the use of fertiliser during reinstatement; • Pre-construction bird surveys to establish the location and population densities of sensitive species. Construction scheduling to be determined on the basis of the results of survey. As a minimum, construction is to be avoided within the Wildlife Protection Area between April and July, particularly for the Caucasian Black Grouse; • If any significant length of trench, in terms of interrupting normal paths or passage used by the various species, needs to be left open for more than a few days (72 hours), points of passage will be provided across it at regular intervals (500m); • Pre-construction ground surveys undertaken to establish the presence of potential brown bear hibernation places; • Construction restricted to periods outside the hibernation season if hibernating bears found. Where presence of bears confirmed specific requirements shall be implemented, including education of workers to be alert and aware of the potential for human/bear interactions e.g. refuse; • Pre-construction survey for Wild Goat. Actions implemented depending on the outcome of these surveys e.g. avoidance of construction activity during sensitive periods at specific locations, worker training regarding non-disturbance of nearby herds; • Pre-construction bat surveys during the summer months to establish the presence and abundance of species and seek to identify summer colonies and potential winter hibernation roosts. Hollow trees within the RoW will be removed during the late summer months under supervision of an ecologist. Caves, ruins or underground cavities, identified as hibernation roosts will be secured and placed out of bounds to avoid their disturbance by workers; • Pre-construction amphibian surveys to establish the presence of appropriate spawning locations within the RoW. Translocation of individuals to be undertaken in those parts of the route where construction is scheduled to occur between May and June; • Ban on hunting wildlife; • Outline Fire Prevention Strategy; • Maximal use of existing, upgradeable roads and RoW for transport • No new access tracks without prior BTC Co. approval to reduce land take in sensitive areas; • Measures to minimise the impacts of heavy machinery e.g. moveable equipment mats or plates; • Noise abatement to be employed and good practice to reduce noise;
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	<ul style="list-style-type: none"> • Strict fuelling and spill control procedures; • Dust suppression techniques to be implemented when working in dry soils or where construction activities generate airborne dust.
Residual Impact	<ul style="list-style-type: none"> • No effect on the protection status; • Short-term disturbance to internationally important flora. Impacts to the nationally-threatened plant species will be minor and short-term (over one generation or less). • Minor impacts at most to mammals during the construction period where the specified mitigation measures are applied for the seasonal sensitivities identified for each species. • Minor impacts at most for breeding birds, except the Caucasian Black Grouse, where pipeline construction is scheduled to avoid seasonal sensitivities. Where the construction schedule dictates work during the breeding season, impacts will be minor, where the RoW is cleared prior to April, and moderate, where construction occurs during the breeding season without prior clearance of the RoW. The impact will be major for the Caucasian Black Grouse as avoidance of the breeding season between April and July is critical due to the potential for young to still be present on the ground during July. • Minor impacts to globally-threatened amphibians, if the construction period avoids the seasonal sensitivity.
Offset Mitigation	Implementation of offset planting;
Objective	To reinstate the pre-construction vegetation in terms of both composition and density.
Plan	<p>Site specific re-instatement plans will be prepared with the assistance of the cooperation of the General Directorate of Afforestation and Erosion Control and when necessary with the General Directorate of Forestry.</p> <p>The Construction Contractor will determine site specific measures for the rejuvenation areas. These measures will be reviewed by BOTA^a and the regional directorates of Forestry.</p>
Timetable	To be set after pre-construction surveys
Budget	<p>US\$ 140.000 ± 20 %.</p> <p><i>Commercial access has been restricted by lump-sum turn-key agreement. Cost estimates are provided by BTC Co. based on assumptions (for afforestation) used in other sheets. Therefore, these costs are indicative only, based on information provided from Ministry of Forestry.</i></p>

Table 5f

Country	Turkey				
Issue	Sarikamis Natural Site Area				
Safeguard Policy Designation	Critical natural habitat	●	Natural Habitat		Cultural heritage value
	As a nationally legally protected site the Sarikamis Forest is considered as Critical Natural Habitat				
Detail of Issue	<p>The route passes through the Sarikamis Forest (in the province of Kars, north and east of the village of Çermikyayla), of which c. 20,000ha are legally protected as a Natural Site Area for its important Scot's Pine forest communities. An existing corridor within the forest has been utilised in routing the Pipeline through this area and the route crosses through c.4.1km of the site between KPs 167.6 – 171.7.</p>  <p>Sarikamis Forest is important for large mammals including Wild Goat (globally -threatened), Brown Bear, Grey Wolf and Roe Deer. Smaller mammals include Mediterranean Horseshoe Bat (globally-threatened), Common Pipistrelle, Greater Mouse-eared Bat, Weasel, European Pine Marten, Beech Marten, Eurasian Badger, Stoat and Caucasian Squirrel. The globally-threatened amphibian, Southern Crested Newt, is also present within the forest, although this species was not recorded during ecological surveys</p>				
Impact	<p><u>Construction Phase Impacts</u></p> <ul style="list-style-type: none"> Impacts on the forest are likely to be slight due to re-routing through existing corridor largely without trees; 				

	 <ul style="list-style-type: none"> • Habitat fragmentation and isolation considered unlikely; • Minor temporary disturbance to globally-threatened mammals during seasonal sensitivities e.g. hibernation and peak spring feeding periods for brown bears (November - April and March - June, respectively); breeding season for wild goats (October- December) and during birthing (March – April); breeding and hibernation periods for globally-threatened bat species, from September to May and for the Common Pipistrelle bat between October and July. • Temporary local disturbance to globally-threatened amphibian species during the spawning season between May and June inclusive; • Damage to adjacent habitat and species due to the incursion of machinery / personnel into nearby sites not directly required for construction purposes • Other disturbance to adjacent habitats and species during construction activities • Risk of introduction of plant diseases brought in from other areas on vehicles and equipment used in the construction; • Compaction of top and subsoils from machinery when reinstating the ESA to levels that may retard plant growth and kill soil microorganisms and bacteria. • Effects of fugitive dust on adjacent habitat. <p><u>Operational Phase Impacts</u></p> <ul style="list-style-type: none"> • Potential impact to flora due to enhanced access for logging
<p>Direct Mitigation</p>	<ul style="list-style-type: none"> • Routed to avoid intact forest areas – the route passes through a non forested corridor; • The RoW will be reduced to 22m; • All construction personnel will be briefed on environmental sensitivities in the surrounding area; • Reinstatement to maintain habitat continuity as far as is practicable within the scope of Reinstatement Plan - revegetation strategy in all sections of the RoW will be to reinstate the pre-construction vegetation in terms of both composition and density. Site specific re-instatement Method Statements; • Care in the use of fertiliser during reinstatement; • If any significant length of trench, in terms of interrupting normal paths or passage used by the various species, needs to be left open for more than a few days (72 hours), points of passage will be provided across it at regular intervals (500m); • Pre-construction ground surveys undertaken to establish the presence of potential brown bear hibernation places; • Construction restricted to periods outside the hibernation season if

	<p>hibernating bears found. Where presence of bears confirmed specific requirements shall be implemented, including education of workers to be alert and aware of the potential for human/bear interactions e.g. refuse;</p> <ul style="list-style-type: none"> • Pre-construction survey for Wild Goat. Actions implemented depending on the outcome of these surveys e.g. avoidance of construction activity during sensitive periods at specific locations, worker training regarding non-disturbance of nearby herds; • Pre-construction bat surveys during the summer months to establish the presence and abundance of species and seek to identify summer colonies and potential winter hibernation roosts. Hollow trees within the RoW will be removed during the late summer months under supervision of an ecologist. Caves, ruins or underground cavities, identified as hibernation roosts will be secured and placed out of bounds to avoid their disturbance by workers; • Pre-construction walkover amphibian surveys to establish the presence of appropriate spawning locations within the RoW. Translocation of individuals to be undertaken in those parts of the route where construction is scheduled to occur between May and June; • Ban on hunting wildlife; • Outline Fire Prevention Strategy; • Maximal use of existing, upgradeable roads and RoW for transport; • No new access tracks without prior BTC Co. approval to reduce land take in sensitive areas; • Measures to minimise the impacts of heavy machinery e.g. moveable equipment mats or plates; • Noise abatement to be employed and good practice to reduce noise; • Strict fuelling and spill control procedures; • Dust suppression techniques to be implemented when working in dry soils or where construction activities generate airborne dust.
Residual Impact	<ul style="list-style-type: none"> • No effect on the Forest's protection status. • Minor impact at most to mammals during the construction period where the specified mitigation measures are applied for the seasonal sensitivities identified for each species. • Minor impacts to globally-threatened amphibians, if the construction period avoids the seasonal sensitivity.
Offset Mitigation	Implementation of offset planting;
Objective	To reinstate the pre-construction vegetation in terms of both composition and density.
Plan	<p>A site specific re-instatement plan will be prepared with the assistance of the cooperation of the General Directorate of Afforestation and Erosion Control and when necessary with the General Directorate of Forestry.</p> <p>The Construction Contractor will determine site specific measures for the regional directorates of Forestry.</p>
Timetable	To be set after pre-construction surveys
Budget	<p>6.0</p> <p>US\$ 9.000 ± 20 %.</p>

	<p><i>Commercial access has been restricted by lump-sum turn-key agreement. Cost estimates are provided by BTC Co. based on assumptions (for afforestation) used in other sheets. Therefore, these costs are indicative only, based on information provided from Ministry of Forestry.</i></p>
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Table 5g

Country	Turkey				
Issue	Miscellaneous semi-natural habitat with internationally & nationally rare plant species				
Safeguard Policy Designation	Critical natural habitat		Natural habitat	●	Cultural heritage value
Detail of Issue	187 internationally or nationally threatened plant species recorded within a corridor 250m either side of the centre line of the route				
Impact	<p><i>Construction Phase Impacts</i></p> <ul style="list-style-type: none"> • Temporary loss of habitat and component species within the construction corridor • Temporary fragmentation of habitats • Temporary severance of ecological corridors • Changes to hydrological regime in wet areas • Damage to adjacent habitat and species due to the incursion of machinery / personnel into nearby sites not directly required for construction purposes • Other disturbance to adjacent habitats and species during construction activities • Potential impact to flora due to enhanced access for logging • Risk of local contamination and pollution of top and subsoils along the route (both inside and adjacent to the RoW) from construction machinery and other waste; • Risk of introduction of plant diseases brought in from other areas on vehicles and equipment used in the construction; • Compaction of top and subsoils from machinery when reinstating the ESA to levels that may retard plant growth and kill soil micro-organisms and bacteria. <p><i>Operational Phase Impacts</i></p> <ul style="list-style-type: none"> • Potential impacts of noise, dust, water pollution etc • Ineffective erosion and flood control measures that lead to the failure of the reinstatement due to degradation and loss of topsoils, subsoils and habitat; • Potential oil contamination of top and subsoils from a Pipeline breach; • Illegal harvesting of rare plant species by plant collectors at some ESAs due to easier access to site from access roads associated with the construction and maintenance of the Pipeline; • Overgrazing of steppe and meadow sites by livestock due to easier access to some ESAs from access roads associated with the construction and maintenance of the Pipeline 				
Direct Mitigation	<ul style="list-style-type: none"> • RoW and Construction working width reduced to 22 m in forest areas; • Pre-construction surveys to identify locations and population sizes of rare floral species • Rare species management: • Translocation of species (plants) to appropriate habitat outside of the RoW or construction area prior to construction; • Removal, nurture and replacement/reinstatement of turfs of endangered or threatened plant species within the RoW or at temporary construction areas; • Site specific re-instatement plans including special area reinstatement 				

	<p>method statements</p> <ul style="list-style-type: none"> • Supervision by ecological advisors throughout construction and reinstatement • Working method statements to be agreed also by Environmental Impact Assessment (EIA) reviewer authorities • Outline Fire Prevention Strategy • Maximal use of existing, upgradeable roads and RoW for transport • Seasonal limitations for particular construction activities; • Awareness training for site staff and workers • Retention of specimens of rare species on edge of RoW • Care in the use of fertiliser during reinstatement; • Minimisation of tree felling and scrub clearance; • Measures to minimise the impacts of heavy machinery eg moveable equipment mats or plates
Residual Impact	<p>Moderate localised impacts to habitats/flora will occur in sub-alpine meadows found along some of the sections of the corridor. Since these impacts will be repeated at several locations across several provinces they can be viewed as being of provincial-national scale in their extent.</p> <p>However, the impacts are also reversible, so while they may extend beyond the short-term, mitigation will ensure that in the medium term (perhaps 3-5 years), local impacts will reduce to minor and the regional/national extent of impacts will be moderate at most.</p> <p><i>Ecologically Sensitive Areas (ESAs)</i></p> <p>ESAs have been defined for the purposes of the project to identify ecologically sensitive locations. In some of the ESAs, moderate, localised residual impacts are anticipated as a result of disturbance to internationally important flora identified during ecological surveys. The degree to which disturbed areas will be recolonised by important flora is uncertain; as a consequence the localised, moderate impacts may be medium to long-term in extent.</p> <p>Medium-term impacts to internationally important flora and supporting habitats are predicted for one ESA. Although, mitigation measures will ensure losses are minimised, disturbance effects may still be detectable after several years due to the fragility of the alpine zone ecosystem along this length of the route.</p> <p>Disturbance to nationally and internationally threatened and endemic plant species at several Ecologically Sensitive Areas including one next to a pump station.</p> <p>Impacts from the block valve sites located within ESAs are predicted to be moderate due to the small area of sensitive habitat affected and the identified mitigation measures.</p>
Offset Mitigation	<p>Implementation of Important Plant Areas (IPA) Project as part of BTC Co.'s specific commitment to undertake compensatory habitat creation and for rare species conservation, in order to compensate for ecological impacts associated with the construction of the Pipeline and its associated facilities.</p>
Objective	<p>A comprehensive Vegetation Mapping Survey study was carried out in order to:</p> <ul style="list-style-type: none"> • Determine which species of threatened and endemic plants occur within the 28m working width of the BTC Pipeline RoW of the ESAs; • Map the populations of these plants;

	<ul style="list-style-type: none"> • Outline the site-specific mitigation measures to protect the threatened and endemic plants occurring within the RoW; and, • Identify any further essential pre-construction follow-up surveys and research needed. <p>The findings and recommendations of this study has helped scoping of the IPA Project which has the following objectives:</p> <ul style="list-style-type: none"> • To map plants at the ESAs, with boundaries adjusted as appropriate. This will augment existing information from the Vegetation Mapping Survey Report; • To compile plant species inventories; • To assess richness and importance of an identified number of ESAs studied against IPA criteria, to determine whether the a site meets the criteria for designation as an IPA; • To define management and monitoring plans for sites that meet IPA criteria; • To identify potential Ecologically Sustainable Enterprise Projects in relation to Management Plans; • To designate IPAs.
Plan	<p>Planta Europa is promoting the creation and protection of IPAs as a complement to BirdLife International’s Important Bird Area (IBA) programme. It is intended that the IPAs be a significant component of the Council of Europe’s Pan-European Ecological Network, and that conservation of IPAs will support implementation of the Global Strategy for Plant Conservation under the Convention on Biological Diversity.</p> <p>BTC Co will implement a project that will identify potential IPAs along the BTC pipeline route, on the basis of the ESAs identified by the BTC Project EIA. The project should build on plant studies of the ESAs already undertaken on behalf of the BTC Project, but independent of continuing studies (including pre-clearance surveys, mitigation measures, reinstatement works, monitoring). The intent is to designate several IPAs.</p> <p>Project proposals are sought that involve the following components:</p> <ul style="list-style-type: none"> • Mapping of plants at the ESAs, with boundaries adjusted as appropriate. This will augment existing information from the Vegetation Mapping Survey Report; • Compilation of plant species inventories; • Assessment of richness and importance of an identified number of ESAs studied against IPA criteria, to determine whether the a site meets the criteria for designation as an IPA; • Definition of the management and monitoring plans for sites that meet IPA criteria; • Identification of potential ESEPs in relation to Management Plans; • Designation of IPAs. Projects will aim for designation of several IPAs. <p>The following or similar activities are to be addressed in five phases:</p> <p><i>Phase I: Desk studies</i></p> <ul style="list-style-type: none"> • Data collation: identification of ESAs to be studied, including potential IPAs; • Collaboration with Planta Europa (and Plantlife UK) in the

	<p>determination of suitable criteria for the definition of IPAs;</p> <p><i>Phase II: Training</i></p> <ul style="list-style-type: none"> • Undertake training of field survey (identification and mapping) team members (e.g. trainee botanists from local universities); Survey participants need to be trained in relevant survey to allow collection of suitable data <p><i>Phase III: Field studies</i></p> <ul style="list-style-type: none"> • Species identification and mapping at selected ESAs; • Mapping of land use; • Use of Geographical Information Systems and satellite imagery for mapping purposes <p><i>Phase IV: Designation</i></p> <ul style="list-style-type: none"> • Establishment of species inventories and maps; • Formal designation of IPAs; • Review of IPA identification guidelines; <p><i>Phase V: Plans</i></p> <ul style="list-style-type: none"> • Development of monitoring plans; • Development of management plans; • Identification of potential Ecologically Sustainable Enterprise Projects (ESEPs), providing alternative sources of employment and income for local communities.
Timetable	<p>The implementing partner for the IPA project is being identified as part of the RFP process for the EIP.</p> <ul style="list-style-type: none"> • Request for Proposals (RFP) advertised: 20 February 2003 • Deadline for Submission of Proposals : 17 April 2003 • Expected Start of Implementation: <u>First week of July 2003</u>
Budget	US\$ 200,000.

Table 5h

Country	Turkey					
Issue	Effects on Forests					
Safeguard Policy Designation	Critical natural habitat		Natural Habitat	●	Cultural heritage value	
Detail of Issue	<p>Approximately 30 km of the 22m wide pipeline right of way (RoW) crosses either intact or fragmented forest. The main areas are as follows:</p> <ul style="list-style-type: none"> • KP 1006 to 1007. East of Ke°i° Creek: @ 1000 metre length lying about one km east of Ke°i° Creek; coniferous forest. • KP 962.3 and 977.0. Karasu Creek: 2410 m length. The dominant type of forests here is coniferous forest while there is a 280 m strip of deciduous lies in the area of interest. Species recorded at KP 965 include: Blasius' Horseshoe Bat, Caucasian Squirrel (both globally-threatened) and Eurasian Badger. • • KP 940.8 and 962.3. ESAs 43, 44 and Geben Reservoir: • about 5 km (5200 m) falls in mixed forest of deciduous and coniferous forests near Geben Reservoir. The forests are located within the segment between KP 940.8 and 962.3. There are seven forested sections - one in ESA 43 (of 300m), three in ESA 44 (amounting to 280m) and four between these two ESAs. • <p>ESA 43 is identified between KP 940.0 and KP 943.8 for eight globally-threatened plant species (<i>Verbascum luridifolium</i>, <i>Alkanna cappadocia</i>, <i>Tanacetum haradjanii</i>, <i>Allium tauricola</i>, <i>Gentiana boissieri</i>, <i>Helianthemum antitauricum</i>, <i>Erodium micropetalutum</i> and <i>Galium antitaurica</i>).</p> <p>ESA 44 occurs between KP 955.9 and KP 961.0 and is identified for eight globally-threatened plant species - <i>Thlaspi cilicicum</i>, <i>Centaurea antitauri</i>, <i>Cephalanthera kotschyana</i>, <i>Corydalis solida sp. tauricola</i>, <i>Johrenia silenoides</i>, <i>Cyclamen pseudo-ibericum</i>, <i>Chionodoxa forbesii</i> and <i>Bupleurum zoharii</i>. In addition, one globally-threatened plant <i>Verbascum luridifolium</i> occurs just outside the corridor south-east of KP 960.2.</p> <ul style="list-style-type: none"> • Grey Wolf was recorded at KP 955.1 and near KP 960.2. This species is not globally-threatened and has no protection in Turkey, although it is protected under CITES, the Bern Convention and the EU Habitats Directive. Forest dormouse, Mehely's Horseshoe Bat (both globally threatened mammals) and Dipper (nationally-threatened bird) also noted. • • Ardahan Province. About 700 meters fell across Scots pine dominated forest. This forest is about 3 km NE of the Ardahan Forest. The RoW does NOT pass through the Ardahan Forests. 					

	<ul style="list-style-type: none"> • • <u>KP 924.6 and 940.8 Degirmendere Reservoir</u>. 420m length within ESA 42 and 5200m mixed forest of deciduous and coniferous forest. <p>ESA 42 is identified between KP 936.8 and KP 938.5 for the globally -threatened plant species <i>Gentiana boissieri</i>.</p> <p>Nationally -threatened birds (Barred Warbler; Northern Goshawk).</p> <p>A central 8m strip will be left fallow and 3m strips either side will be replanted with shrubs and non-deep rooted trees (to maintain pipeline integrity but not tall forest trees Re-instatement of RoW includes planting with. The remaining 8m will be planted with trees.</p>
Impact	<ul style="list-style-type: none"> • <i>Construction Phase Impacts</i> Direct habitat loss of forest within RoW; • Habitat fragmentation and isolation; • Effects on populations of rare plants; • Damage to adjacent habitat and species due to the incursion of machinery / personnel into nearby sites not directly required for construction purposes Other disturbance to adjacent habitats and species during construction activities • Risk of introduction of plant diseases brought in from other areas on vehicles and equipment used in the construction; • Compaction of top and subsoils from machinery when reinstating the ESA to levels that may retard plant growth and kill soil micro-organisms and bacteria. Effects of fugitive dust on adjacent habitat; • • Karasu Creek • Illegal hunting of Caucasian squirrel • Temporary disturbances to Blasius' Horseshoe Bat if construction during sensitive period (produces young: late spring; hibernates: September/October – May). • ESAs 43, 44 and Geben Reservoir <p>Potential for direct disturbance to the Dipper during nesting, feeding or indirectly, through habitat loss if construction is undertaken during the breeding season (i.e. between April and July inclusive). July can remain sensitive for late and second broods.</p> <p>Minor temporary impacts to wolves due to hunting, Minor temporary disturbances are expected to globally -threatened mammals during seasonal sensitivities:</p> <p>Mehely's Horseshoe Bat (produces young: late spring; hibernates: September/October - May).</p> <ul style="list-style-type: none"> • Forest Dormouse: breeding season (May - August). • • Degirmendere Reservoir: • Potential for direct disturbance to nationally-threatened birds (Barred Warbler; Northern Goshawk) during nesting, feeding or indirectly, through habitat loss if construction is undertaken during the breeding season (i.e. between April and July inclusive). July can remain sensitive for late and second broods. • <p><i>Operational Phase Impacts</i></p> <ul style="list-style-type: none"> • Potential impact to flora due to enhanced access for logging

<p>Direct Mitigation</p>	<ul style="list-style-type: none"> • Routed to avoid intact forest areas – as far as possible the route passes through non forest areas or degraded forest blocks; All construction personnel will be briefed on environmental sensitivities in the surrounding area. The working width will be reduced to 22m in areas of forest. Minimisation of tree felling and scrub clearance; Trees to be felled to reduce damage to adjacent areas of forest; Reinstatement to maintain habitat continuity as far as is practicable within the scope of Reinstatement Plan - revegetation strategy in all sections of the RoW will be to reinstate the pre-construction vegetation in terms of both composition and density. Site specific re-instatement Method Statements; Care in the use of fertiliser during reinstatement; Rare species management: Translocation of species (plants and animals) to appropriate habitat outside of the RoW or construction area prior to construction; Removal, nurture and replacement/reinstatement of turfs of endangered or threatened plant species within the RoW or at temporary construction areas; Retention of specimens of rare species on edge of RoW; Ban on hunting; • Outline Fire Prevention Strategy; Maximal use of existing, upgradeable roads and RoW for transport. No new access tracks without prior BTC Co. approval to reduce land take in sensitive areas; Seasonal limitations for particular construction activities; Measures to minimise the impacts of heavy machinery e.g. moveable equipment mats or plates. Installation of soft plugs in trench to allow crossing by wildlife. Noise abatement to be employed and good practice to reduce noise; Sediment control measures to be enforced, including the use of straw bales, silt fences and settlement lagoons depending on river characteristics and seasonal conditions; Provision of treatment facilities and enforcement of discharge standards for sewage discharges; Selection of abstraction locations on the basis of the hydrological and ecological characteristics of the water body and compliance with criteria required to obtain an abstraction permit; Strict fuelling and spill control procedures; Dust suppression techniques to be implemented when working in dry soils or where construction activities generate airborne dust. • Karasu Creek: • Rare floral species management; • Ban on hunting of Caucasian squirrel; • Pre-construction surveys during the summer months to establish the presence and abundance of including Blasius' Horseshoe Bat and seek to identify summer colonies and potential winter hibernation roosts. Hollow trees within the RoW will be removed during the late summer months under supervision of an ecologist. Caves, ruins or underground cavities, identified as hibernation roosts will be secured and placed out of bounds to avoid their disturbance by workers; • • ESAs 43, 44 and Geben Reservoir: <u>Rare floral species management</u> <u>Pre-construction surveys to establish if suitable Dipper breeding habitat is available within 250m of Karapinar Creek. If suitability of breeding locations confirmed – construction avoided April – July.</u> • Pre-construction surveys during the summer months to establish the presence and abundance of including Mehley's Horseshoe Bat and seek to identify summer colonies and
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Residual Impact	
Offset Mitigation Objective	
Plan	
Timetable	Will be set after pre-construction surveys

Budget	<p>Total: US\$ 750,000 ± 20 %</p> <p>Main areas:</p> <p>Ke°i° Creek US\$ 25,000 ± 20 %;</p> <p>Karasu Creek: US\$ 62,000 ± 20 %.</p> <p>ESAs 43, 44 and Geben Reservoir: US\$ 145,000 ± 20 %.</p> <p>Ardahan Province: US\$ 20,000 ± 20 %.</p> <p>Degirmendere Reservoir: US\$ 155,000 ± 20 %.</p> <p>Ardahan Province: US\$ 20,000 ± 20 %.</p> <p><i>Commercial access has been restricted by lump-sum turn-key agreement. Cost estimates are provided by BTC Co. based on assumptions (for afforestation) used in other sheets. Therefore, these costs are indicative only, based on information provided from Ministry of Forestry.</i></p>
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BAKU-TBILISI-CEYHAN
PROJECT COMMUNITY INVESTMENT PLAN
Final
MARCH 2003

Project Community Investment Plan for BTC and SCP

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Glossary

AZG	Azerbaijan - Georgia - Turkey
BTC Co	Baku Tbilisi-Ceyhan Pipeline Operating Company
CARE	Co-operative Assistance and Relief Everywhere
CI	Community Investment
CLO	Community Liaison Officer
CS	Contract Strategy
CIP	Community Investment Programme
DFID	Department For International Development
ESIA	Environmental and Social Assessment
EU	European Union
GTZ	German Agency for Technical Co-operation
ICCN	International Centre on Conflict and Negotiation
IFC	International Finance Corporation
M&E	Monitoring and Evaluation
NGO	Non-Governmental Organisation
PAC	Pipeline Affected Community
PCIP	Project Community Investment Plan
RAP	Resettlement Action Plan
RFP	Request for Proposals
SCP	South Caucasus Pipeline
SI	Social Investment
SME	Small and Medium Enterprises
SOW	Scope Of Work
UNDP	United Nations Development Programme
USAID	United States Agency for International Development

7.0 1 PROJECT COMMUNITY INVESTMENT PLAN - INTRODUCTION

7.1 1.1 Purpose of the document

This Project Community Investment Plan (PCIP) has been prepared for the BTC Co Project. It also covers community development activities funded through the SCP budget for Azerbaijan and Georgia. The document makes references to other social investment programmes in the context of how they link with the BTC and SCP Pipeline Projects. The objective of the PCIP is to describe the approach, procedures and commitments that will be undertaken for the BTC Co and SCP Community Investment Programme (CIP) during the construction phase of the pipeline. The basis for the PCIP is the commitments made by BTC Co and SCP with respect to community investment. In doing so, the plan serves as an important part of the social investment process in translating these commitments into community development actions in the three countries of Azerbaijan, Georgia and Turkey. The PCIP covers the community investment programme funded by BTC Co and SCP. The programme is managed by the BTC Co teams in the three countries with BTC Co in charge of the programme overall.

The dual aim of the CIP is to provide initial immediately visible results, and translate these activities into longer-term self-sustaining projects. As a result, the proposed programme is limited to the priority geographic areas and four key sectors and themes: economic opportunities and income generation, strengthening of rural and agricultural systems in the communities, health and sanitation, and social and economic infrastructure rehabilitation. Priority will be given to programmes that maximise impact and sustainability and keep delivery costs to a minimum. A requirement of the implementation and execution will be to include monitoring and evaluation instruments as well as key performance indicators against which success can be assessed. Those elements, together with country-specific considerations such as structure of potential implementation partners, legal and technical requirements, and development-related characteristics, provided the background for the RFP document.

In order to obtain a full appreciation of the CIP activities in these countries, the reader should refer to the respective country-specific Requests for Proposals (RFP), which set out the specific country programmes. Since all countries are at different stages in the CIP process it is important to view the PCIP as a 'living' document. The PCIP will be up-dated as and when new information becomes available, including further information on other social investment activities such as Azeri (ACG Phase 1), Shah Deniz, etc. All documents will be available on the Project web site at www.caspiandevlopmentandexport.com.

For the purpose of this document, the term 'community investment' refers to community-specific projects aimed principally at the communities living near project activities, and the term 'social investment' refers primarily to broader forms of support aimed at

institutional development and capacity building activities important to a country's overarching economic and social development.

7.2

7.3 1.2 Scope of work

The BTC Co and SCP Project Partners¹ see positive economic and social performance as essential factors for sustainable business. The BTC Project will bring significant social, economic and community-related benefits to Azerbaijan, Georgia and Turkey. These will take the form of global management expertise and leading-edge technology, recruitment and investment in the development of local employees, purchasing of local goods and services, development and enhancement of local infrastructure, and most importantly, generation of revenues for the governments, which can serve as a catalyst for the countries in addressing key socio-economic development needs.

BTC Co corporate policy states that the company will generate “economic benefits and opportunities for an enhanced quality of life for those whom our business impacts.” To meet this goal, BTC Co has committed to designing and implementing a community investment programme in the areas affected by construction activities. The BTC Co.'s Community Investment Programme will go beyond the social impact mitigation measures described in the ESIA Reports, and take a step further in order to meet the goal of having a positive influence in the areas in which BTC Co operates.

Over and above these contributions, other related oil and gas projects are engaging in significant social and community investment programmes intended to make a positive difference in Azerbaijan, Georgia and Turkey. The goal of social investment is to create sustainable development for local populations – to generate employment opportunities and a steadily improving quality of life, both during the period when the oil and gas industry is most active, and also in the longer term when operations have concluded.

Social Investment (SI) in Azerbaijan, Georgia and Turkey embraces a multitude of programmes, projects and activities that cover the entire band of macro-, mezzo- and micro-level interventions commonly associated with development-related investments. Issues at the macro level are covered by the Regional Review document that discusses activities related to issues such as access to energy and revenue management. At the mezzo level social investment translates into capacity building and institutional development projects through, for example the support of national NGO representation structures, the enhancement of education, assistance to SMEs and their support structures, be it the Enterprise Centre (in Baku) or specific project designs that support a range of small and medium enterprises in a given sector. Training seminars for media and journalists, workshops on NGO

¹ The BTC Owner group comprises BP (operator), Unocal, Statoil, TPAO, ENI, Itochu, ConocoPhillips, INPEX, TotalFinaElf, Amerada Hess, and SOCAR while the SCP Owner Group comprises BP (operator), Statoil, LukAgip, NICO, TotalFinaElf, TPAO and SOCAR respectively

management and administration, and support for civil society NGOs are other examples.

Sectoral engagements of SI include civil society aspects, education, business development and enterprise support. Institutional commitments cover universities, business support organisations, and organisations in civil society development. Issues covered include energy-related subjects, economic development and business frameworks, educational structures and employment.

At the micro level, Community Investment (CI) activities - as a part of the social investment programme - are about engagement in community-specific projects, aimed principally at the communities living near project activities. There are many challenges in developing and delivering an effective and sustainable community investment programme due to the projects' geographic spread across the three countries and the given time frame of about three years.

7.4 1.3 Community Investment in context

To underline the commitment to the communities and the population along the pipeline route BTC Co has developed a Community Investment Programme (CIP). The overall purpose of the CIP is to provide positive benefits through the promotion of sustainable social and economic and environmental development for the communities along the BTC Co pipeline route, within Azerbaijan, Georgia and Turkey.

As a project benefit, the CIP goes beyond the mitigation measures that the Project will employ and the compensation of affected people for adverse impacts (such as compensation for land acquisition and crop disturbance). However, CIP activities would indeed support and complement some of these mitigation measures in order to maximise benefits to the pipeline affected communities. The CIP is at the core of the progress².“ It ensures that additional benefits are brought to the settlements along the pipeline route in order to establish it as a ‘good neighbour’, and to meet policies and objectives set out in the respective ESIAs. To this extent, the CIP will also have links with the respective country Environmental Investment Programmes.

The CIP covers priority geographic areas and key sectors and themes discussed later in this document. Priority will be given to programmes that maximise impact and keep delivery costs to a minimum.

The BTC Co community investment programme commenced in 2003 and will run for an initial period of three years up to 2005. The programme aims to support development initiatives that are sustainable and which brings long-term benefits to the affected areas. The programme will be implemented along the entire length of the pipeline and will address the majority of project-affected settlements, e.g. those communities that are likely to experience impacts within the 4km pipeline construction corridor, 5km of construction camps and close to access roads (for more

² BP policy document “What we stand for”

detailed definitions – please refer to relevant country ESIAAs). It should be understood that some settlements will receive only indirect CIP benefits and that where there are direct benefits these might vary between settlements and depend on the potential for suitable and sustainable project activities. As development projects are implemented and proven to be sustainable, effective and efficient, the programme might be extended to outlying communities.

7.5 1.4 Link to other SI and CI activities

In addition to the CIP under the BTC Co umbrella, other performance units within the Azerbaijan Business Unit, including Azeri, Operations and Shah-Deniz have SI-related activities mainly concentrating on community development. Those activities are chiefly located in Azerbaijan but some extend to Georgia.

Azeri Project:

Azeri Project (the oil and gas terminal near Sangachal) has a comprehensive community investment project and operates with a six year CI volume of US \$2.5 million. The activities at present concentrate on improving income-generation activities and economic opportunities for affected communities, support access to improved social infrastructure and improved awareness of health and sanitation issues.

Through the BP100%-Fund, both SI and CI activities are supported with a funding volume of US \$500,000 per year. These projects are not designed to overlap with activities under the CIP but to complement and align along the broader lines of the SI policies.

The Social Investment activities cover a multitude of projects around issues identified in the Regional Review document such as strengthening local businesses, revenue management, energy, education, public policy engagement, institution building and capacity development of developmental and civil society structures, and community development. The Regional Review document serves as a strategic resource for funding activities covered under SI and provides a framework for the objectives and funding priorities. For example, activities selected under the BP 100% funds are expected to fall within this framework. Projects can last from some months up to two or three years as e.g. in the case of the Public-Private Partnership (PPP) project providing Technical Assistance to the oil-sector related supply chain SMEs in Azerbaijan. This project is co-funded by the BMZ/GTZ and receives additional funds from IFC, UNOCAL and STATOIL. As such it is a direct result of issues identified within the Regional Review.

BP 100%-Fund - Solar power for rural communication:

Providing communication coverage in rural areas is often problematic due to infrastructure costs, remoteness of the sites and difficulties in connecting to an electricity grid. Use of modern mobile technologies however allow for cost reductions and sustainable technical solutions. In those cases solar power is often the best economic solution.

A project of solar-powered electrification for rural telephone systems in 22 remote villages of the Guba region in Azerbaijan, funded by BP and implemented by Total Energy, a solar systems integrator, helped local communities to enjoy the benefits of rural telephony for their communication needs. The villages were connected to the national communication grid using photovoltaic systems from BP Solar as a sustainable option for a telecommunication network operating regardless of electricity.

In terms of volume over the coming years some of the CI and SI activities funded by Azeri and Shah-Deniz come close to the investment under BTC Co and SCP and will make a significant contribution outside the BTC corridor. The operations closely coordinate their respective activities to maximise potential synergies and geographic coverage.

7.6 1.5 Link to the ECIP

The BTC Co Community Investment Programme aims to support social investment projects mainly in the form of community development, that are sustainable and that bring long-term benefits to project areas in Azerbaijan, Georgia and Turkey.

The approach is to ensure integration of the CIP and the EIP to ensure a holistic approach to the social and environmental elements with the aim of sustainable initiatives.

During the project and partner identification stage commonality has been assured by adopting the same approaches, in particular the adoption of the Requests for Proposals process.

The specific links can only be developed during the project implementation stage. Whilst synergies will be sought wherever possible throughout CIP and EIP programmes, the themes vary in the potential for linkages. For example, in Georgia there is some potential for linking with the CIP community forestry and environmentally sustainable energy theme and the EIP sustainable forest management theme.

Figure 1: Summary of Social Investment / Community Investment Programmes

CIP/SIP Matrix - profile of funding arrangements and objectives

Funding Initiative	Value	Funding Period	Coverage	Objectives	Informed by
SIP BP 100%	500,000	2003	AzBU	To promote sustainable social and economic development	Regional Review
	500,000 p.a.			Specific Issues:	
				Fostering economic activity	
				Support to the non-oil economy	
				Revenue management and transparency	
				Access to energy	
				Support of the PRSP	
				Human Rights, Conflict, Ethics, etc	
				Civil Society Development & Education	
				Health & Environment	
CIP AZERI - (ACG Phase 1)	2,500,000	2001 - 2006	Sangachal Baku	To promote sustainable social and economic development	Neighbouring settlements
				Specific Objectives:	
				To improve income earning and economic opportunities	
				To improve living conditions and access to basic needs	
				To support access to improved social infrastructure	
				To support the capacity of communities to self organise, manage and initiate community driven development	
CIP - BTC Turkey	9,000,000	2003-2005	Turkey	To promote sustainable social and economic development	ESIA/RAP studies
	RFP1: \$4m	2003-2005		Specific Objectives:	
	RFP2: \$2m	2004-2005		To improve income earning and economic opportunities	
	Other: \$3m	2003-2005		To support the development and improvement of the agricultural sector	
				To raise awareness of and improve access to social	
				To support the capacity of communities to self organise, manage and initiate community driven development	
CIP - BTC/SCP Azerbaijan	8,000,000	2003-2005	Azerbaijan	To support the creation and empowerment of community level institutions, investments in social and physical infrastructure and to support community based, sustainable income generation activities and other similar economic opportunities	ESIA/RAP studies
	RFP1: \$4-5m	2003-2005		Specific Objectives:	
	RFP2: \$2-3m	2004-2005		To support income generation interventions and improve livelihoods	
	Other: \$1-2m	2003-2005		To support access to improved social infrastructure	
				To support development of the agricultural sector	
				To improve awareness of health and sanitation issues	
CIP - BTC/SCP Georgia	8,000,000	2003-2005	Georgia	To support sustainable income generation activities, investments in infrastructure, and programmes in environmentally sustainable energy	ESIA/RAP studies
	RFP1: \$5m	2003-2005		Specific Objectives:	
	Other: \$1m	2003-2005		To improve income-earning and economic opportunities	
	Other: \$2m	2003-2005		To improve living conditions and access to basic needs	

8.0

9.0 2. COMMUNITY INVESTMENT PROGRAMME - PROCESS

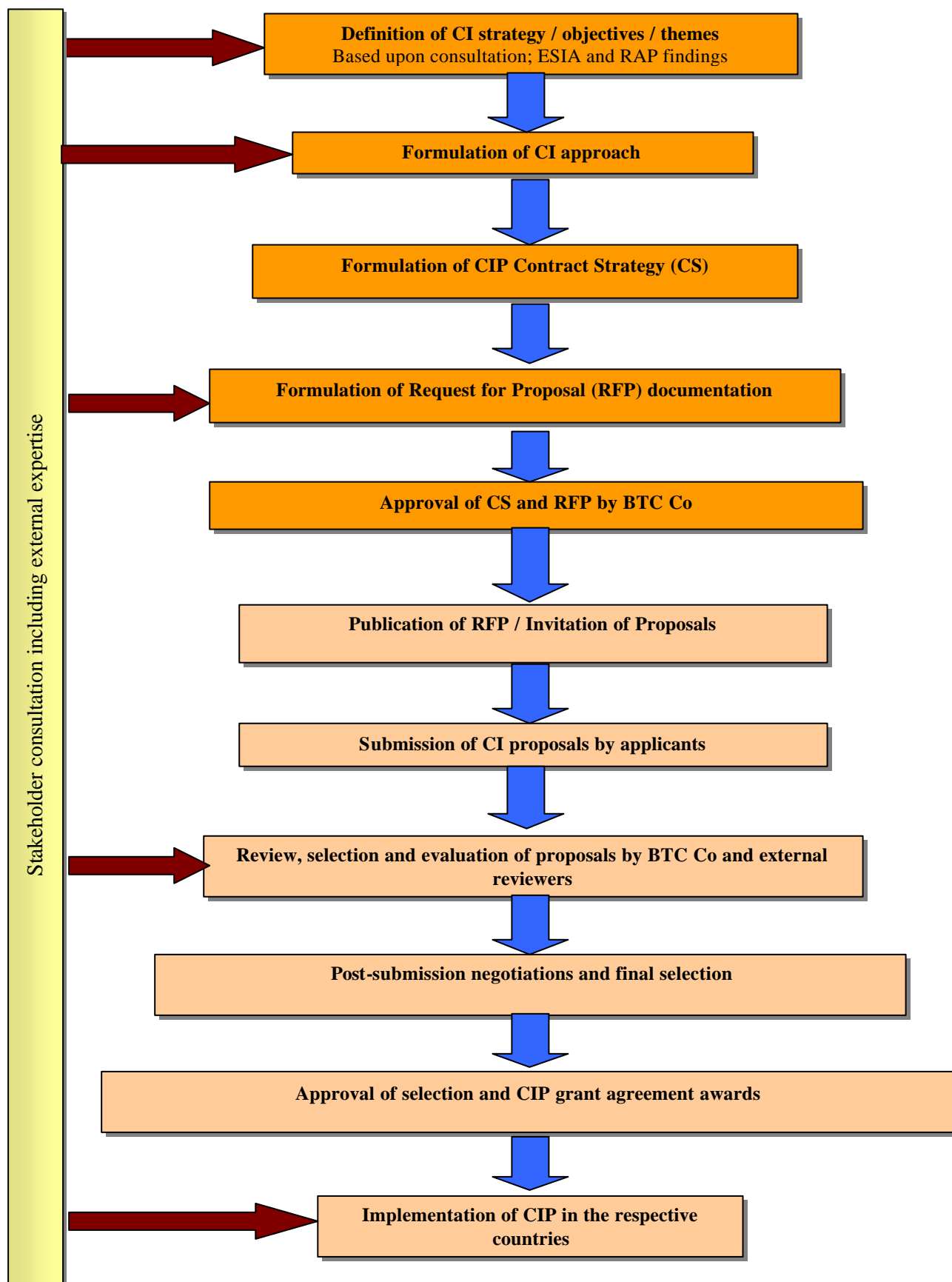
9.1 2.1 Strategic objectives

The process followed by the CIP – from the definition of the CI strategy to the selection of projects - follow best international practice. For example, community participation and strategic partnerships have been identified as essential to a programme's success. Best practice today is directed towards programmes that take a longer-term view and build on individual, community and government strengths and capabilities. Best practice manuals on 'Effective public Consultation and Disclosure' and 'Investing in People: Sustaining Communities through Improved Business Practice' developed by the IFC have been adopted to support the design of the community investment programmes.

All CI programmes, projects and activities make reference to previous and present efforts and have built upon the consultations undertaken for the ESIAs and RAPs. Findings from these studies influenced the overall objectives formulated for the CI programmes in the respective countries and provided the backbone for comprehensive community needs assessments.

With the specific challenge to design focused and manageable programmes, given that the pipeline projects cover 1760 kilometres across three countries, and pass approximately 550 communities, the CI programmes have had to be designed to specific conceptual criteria but that still allow for flexibility to accommodate specific geographic and structural differences that ensure effective delivery and collaboration with communities and other partners. The process of formulating the CIP is illustrated in the flow diagram below:

Figure 2. CIP Selection Process



9.2 2.2 CIP strategic orientation

The proposed CI programmes cover a multitude of projects over a period of 24 to 36 months. The three countries used the findings, consultations and base line studies of the ESIA and RAP processes as the starting point for the development of the CIPs. The common element for all is the involvement of communities in setting the respective priorities. The CIP programmes have a dual aim to provide initial immediately visible results in the form of quick impact projects, and translate these into longer-term self-sustaining projects.

- **Long-term Sustainable Development Projects:** these projects will form the bulk of the Community Investment Programme and will aim to provide long-term sustainable development benefits.
- **Local Community Quick Impact Projects:** these projects are relatively small in scale and duration but respond to an immediate felt need at the community level and build trust in the CIP.

The proposed programmes are limited to the priority geographic areas and broadly the following key sectors and themes:

- Economic opportunities and income generation,
- Strengthening of rural and agricultural systems in the communities,
- Strengthening of community capacity and access to training and education,
- Health and sanitation,
- Social and economic infrastructure rehabilitation.

The key sectors and themes are consistent across all three countries, but will vary to a limited extent from country to country according to the specific needs. Priority will be given to programmes that maximise impact and sustainability and keep delivery costs to a minimum. A requirement of project implementation will be the inclusion of monitoring and evaluation instruments as well as key performance indicators against which progress can be measured and assessed.

9.3 2.3 CIP Methodology and programmatic structure

Community investment follows methodologies that have been successfully developed and implemented by the international development community worldwide. The CI centres on the communities and is community-driven in its approach. One of the aims is to strengthen the organisational capacity of communities in order to enable them to pursue their immediate needs, objectives and interests. Specific empowerment techniques are used to assist the communities to organise and structure themselves. External organisations such as NGOs will be the facilitators and moderators and provide technical expertise.

As mentioned above, BTC Project socio-economic assessments were used as instruments formulating the three country programmes' objectives. The results of the

information gathered were used to identify the objectives outlined below in Section 2.4.

Though not part of the formulation of Project objectives, separate in-depth studies and needs the implementing partners will carry out assessments during the early CIP implementation stages. They will collect data from the local communities regarding their concerns and needs using specific tools as e.g. rapid appraisal techniques/participatory rural appraisal.

9.4 2.4 CIP objectives

The purpose of the community investment programme is to have a positive impact on communities affected by pipeline construction activities through provision of direct benefits, and through engagement with local communities in a sustainable way. The main objective of the CIP is the promotion of sustainable social, economic and environmental development with project-affected settlements along the BTC Pipeline route.

Given the operational requirements, funding limitations and time, it was recognised that interventions under the Community Investment Programme will not be able to provide assistance for everyone. Priority will be given to programmes that focus on the following:

- ***Increased economic opportunities for income and employment*** creation through the provision of a mix of instruments (micro-finance, rural credit in combination with vocational training, business services for micro-enterprises, extension services for rural areas
- ***Capacity building and institutional strengthening*** to develop organised and strengthened communities so that they are better able to meet their own needs through community mobilisation initiatives and community driven development approaches and to ensure that communities are involved at all stages of project selection, implementation and management
- ***Refocused health and sanitation programmes*** to produce greater impact and sustainability at the community level. Activities that are identified should transition into locally run programmes that are able to sustain themselves through local financing and/or user fees or other cost recovery schemes while avoiding setting up parallel structures
- ***Improved economic and social infrastructure at the local level through community organisation and participation, with rehabilitation of existing facilities and structures given a priority***

The community investment programmes are designed to focus on these objectives. The CI programme applies best-practice criteria for the selection of both individual projects and partners for implementation of projects. These criteria draw on international community/social investment standards and local experience gathered through the implementation of the existing programmes in the country. The programmes will not limit themselves to recommendation-type interventions only, but

will deliver projects that serve both as demonstration and as contribution to the improvement of the livelihood of the communities.

9.4.1.1.1.1.1.1 CI programme background criteria:

The criteria for the contextual setting of programmes and projects will include the following:

- **Community needs based:** Programmes and projects must be designed in consultation with communities and other stakeholders experienced in community investment and development in the country.
- **Impact:** Material delivery of programmes and projects is to be directed towards social, economic and/or environmental benefits to communities directly or indirectly affected by the project.
- **Sustainability:** Programmes and projects should be designed to deliver lasting benefits, whether short-term or long-term in nature.
- **Transparency:** Transparency of programmes and projects that are open to internal and external scrutiny and subject to reporting to allow potential beneficiaries, NGOs and authorities, lenders and other donors to understand the approach.
- **Prevention of duplication:** In selecting projects, avoiding duplication of the efforts of other organisations, international and local agencies or government departments. However, leveraging opportunities with existing programmes and co-operating with existing organisations is acceptable and in some cases desirable.
- **Measurement:** Identifiable targets and measurements of programme and project success.
- **Local participation:** Programmes and projects should aim to encourage participation and contributions from local communities.
- **Local implementation:** The approach should encourage, as far as possible, the implementation of development projects to be managed by local NGOs and CBOs and should allow for transfer of experience and capacity building.
- **Partnerships:** Programmes and projects should encourage the development of partnerships between the commercial operations and a wide range of organisations/civil society.
- **Monitoring and measurement:** identifiable targets and measurements of programme and project success.
- **Best practice:** programmes and projects that represent “best practice” in community investment.
- **Cost:** well thought-out and value for money comprehensive budgets with effective control and oversight mechanisms.
- **Leverage/matching funds:** programme and project to facilitate the flow of additional funds into the project area and encourage the development of additional activity in the communities beyond the scope of the CIP

9.5 2.5

CIP Process for application: Request for Proposals

Request for proposals (RFP) as a selection instrument for identifying potential programme activities is best practice as it allows seeking for best alternatives and the combination thereof.

The RFP incorporates elements of conceptual, methodological, technical and funding components in relation to the key objectives to be pursued. For example the target geographical areas, budget guidelines and sectoral priorities, etc. are defined. The RFP also specifies the time frames and defines the contractual strategy and requirements for the implementing partners. Overall project periods and budgets per country were specified.

The primary objective of the overall RFP strategy is to select organisations and structures that can best work with BTC Co to deliver the project objectives relating to the Community Investment Programmes in Azerbaijan, Georgia and Turkey. In this context, selection will not only be based on cost but considers other factors determining best value such as the proposals themselves, socio-economic impact, relevant experience, competency, understanding of BTC Co requirements, and commitment to delivering BTC Co.'s objectives, within the available timeframe and resources available.

The RFP encouraged qualified and experienced NGOs and other competent organisations to submit proposals individually or as groups. Groups would be led by one organisation – the lead applicant. Lead applicants were asked to provide a management plan that detailed conceptual and contractual arrangements between the parties involved, areas of responsibilities and to explain managerial and operational structures, as well as budgets. Lead applicants are expected to commit to partnership agreements (teaming agreements) and/or sub-contracts with proposed partners that will be formalized after grants are awarded (to ensure compliance with BTC Co. and BP contractual standards).

International NGOs were encouraged through the language of the RFP to include local NGOs and other national organizations in their implementation plans within their proposals. In Turkey, however, with a strong network of national NGOs, implementation relies more heavily on national NGO capacity.

To encourage greater ownership with implementing partners, applicants were strongly encouraged to either provide matching funds and/or leverage funds from internal and/or through third party donors. With an overall timeframe of up to 36 months, applicants were asked to design proposals and propose activities for the coming years until the end of 2005.

9.6

9.7 2.6 CI Programme budget

The allocations made for the CIP activities are different in the three countries. The initial combined budget was US \$6 million apiece. Subsequently, additional funds worth between US \$2 million and US \$3 million each have been pledged for Azerbaijan and Georgia, and Turkey respectively (see table below).

AZERBAIJAN		GEORGIA		TURKEY	
Total:	US \$8	Total:	US \$8	Total:	US \$9
million		million		million	

Azerbaijan and Turkey opted for a phased approach whereby a second RFP will build on the results of the initial initiatives following a gap analysis and mid-term review. Georgia opted for a three-year programme with a mid-term evaluation that will implement lessons learned over the first 18 months.

There is flexibility in the CIP design to allow for adjustments based on lessons learned. In effect, the CIPs are living programmes accommodating changes in the local development environment and modifications in recipient behaviour.

9.7.1 2.6.1 CI contingency budgets

Whilst most of the CI funding is committed under the respective RFPs, a portion of the funding has been kept for contingencies by the respective countries. The contingency volumes vary in each country though these funds will still be spent on CI activities. The intention is to provide a cushion for unexpected gaps that might identify themselves, to finance additional investment in key sectors that may be broader in scope than the implemented CIP. In addition, it may finance CI activities that are not covered by the specific initial objectives, but that still fall into the overall country objective.

9.8 2.7 Country-specific elements in CIP design

While all countries apply the same programmatic strategy and technical processes, country-specific aspects however require the incorporation of individual design elements. These design elements mainly reflect the local country contexts and their respective capacities for CIP implementation. Georgia provides a rich environment of donors and capable national and international implementing partners with sound expertise and in-country experience. The national NGO scene in Azerbaijan is still young and provides limited capacities in CI implementation. In addition, the donor situation is different with some of the key agencies in Georgia not represented in Azerbaijan and Turkey. Turkey again has a mature national NGO structure with a limited international NGO presence. Consequently, development programmes are more often implemented through national structures.

9.8.1 2.7.1 Azerbaijan

The Azerbaijan CIP will operate in two phases: During the First Phase the project will disburse roughly half of the CIP fund for projects that come out of the RFP – this could be between US \$4 and \$5 million, depending on final funding determinations (a total of US \$8 million has been indicated but confirmation on the full amount is

pending). A gap analysis of Pipeline Affected Communities (PACs) will be conducted roughly six months after the implementing partners selected from the first RFP process, begin implementation. The gap analysis will be used to identify shortfalls in terms of geographic and or thematic coverage of PACs and will be conducted by a team made up of local and/or international NGOs with relevant experience. The Assessment of the analysis will be conducted by BTC and implementing partners to develop a potential project list for those PACs identified.

The second phase of the CIP will commence roughly nine months after the first phase awards have been made and will use the gap analysis to develop community/project Scopes of Work (SOWs). The SOWs will be developed by BTC and implementing partners and implemented primarily by selected local NGOs. Individual SOWs will be loosely grouped according to geographic coverage and thematic objectives where possible. Pre-selected individual and groups of local NGOs (with possible oversight from an implementing partner or other INGOs depending on project value and risk) will be invited to submit proposals for implementation of SOW. Pre-selected NGOs would include those local NGOs already working as partners with implementing partners and those NGOs focused on community development identified in the RFP process that have relevant experience and competencies for the SOWs that came out of the gap analysis Assessment. Pre-selected NGOs could potentially include NGOs that have community development experience and have been involved in NGO training programs at the Enterprise Centre in Baku. Initially, projects will be awarded singly, but as local NGOs provide assurance of delivery and capacity for implementation, (geographic and/or thematic) blocks of projects could be awarded to individual or groups of NGOs. Initial individual SOW based project values could be around US \$20,000 and blocks of projects values could be around US \$100,000. All selections are subject to a review process that sees the involvement of external reviewers from multi-and bilateral organisations in their individual capacity. The process follows the procedures described in Section 2.8. The expected outcomes of this strategy include additional flexibility in meeting missed or developing community needs, alignment with BP policies and goals of local content (more CIP funds disbursed through local organisations), increased capacity among local NGOs for delivery of community development projects and improved reputation for local NGOs in the eyes of local communities and authorities as well as in the eyes of the national government increased cost effectiveness of CIP funds disbursed together with opportunities to attract and leverage other donor funds and increase the likelihood of sustainability. Opportunities are given to provide a more organic approach to investment and to include communities that are tied to PACs but outside of the 4km corridor, as well as opportunities for developing alternative exit strategies beyond the end of construction.

9.8.2 2.7.2 Georgia

Given that BTC Co. wishes to have a harmonious environment for the project with good relationships with communities who take an interest in pipeline security, the project elected to finance a CIP that goes over and above mitigation measures outlined in

the ESIA. Extensive consultation was done with government, NGOs and donors on the CIP concept, which confirmed both the approach of the Georgia CIP and the key sectors for investment.

At the time of writing Georgia has awarded two grants of US \$2.5 million each. The remaining volume of US \$3 million will see additional CI and SI-related activities that will be determined in a second round process. The goal of the Georgia CIP is to promote sustainable social, economic and environmental development for the communities along the pipeline route. As such the CIP aims to build the capacity of communities on the route to implement and sustain self-help project with minimal external support. The intention is to implement infrastructure and other interventions as both a direct benefit, and as a tool for building community capacity. Other key features of the approach include:

- Recognising that community development is a challenging and specialised field of work, the approach was to provide grants to organisations who have expertise in the field and who have a competitive advantage in implementing programmes like the CIP. Organisations were encouraged to form consortia, which could address the various sectors of the CIP. International NGOs were required to partner with local NGOs.
- Given that sustainable community development is a long-term process, it was decided that a three-year timeframe was appropriate given the low level of capacity within rural villages on the pipeline route. This provides continuity and allows for more extensive relationship building and capacity development within the communities. In addition it reduces administrative costs.
- An Advisory Board made up of individuals from donor organisations active in Georgia has been formed to provide assistance to BTC Co. in monitoring the programme. The Board will also provide a donor coordination function to ensure that the CIP complements other donor activities and plans in the area.
- It was also decided to split the route into two halves, both serving a roughly equal population base, so as to reduce the project's risk and to increase the opportunities for different approaches and sharing of lessons learned.
- In order to build positive relationships early in the project implementation, a two-phased approach was adopted. The first phase of activities will focus on participatory identification of quick impact projects that can be undertaken with a small amount of funds and a short amount of time. The intention is to build trust in the CIP programme and confidence within communities that they can achieve benefits from the pipeline project. Using the first phase as a basis, a second phase of longer-term sustainable development activities will be implemented.
- A 20% community contribution to all infrastructure development projects is required. This is in line with other donor-funded projects in the area, which find that the likelihood of long-term ownership and maintenance of infrastructure is much higher, when communities have made a contribution themselves. In most cases, the contribution is in kind, in the form of labour.

9.8.3 2.7.3 Turkey

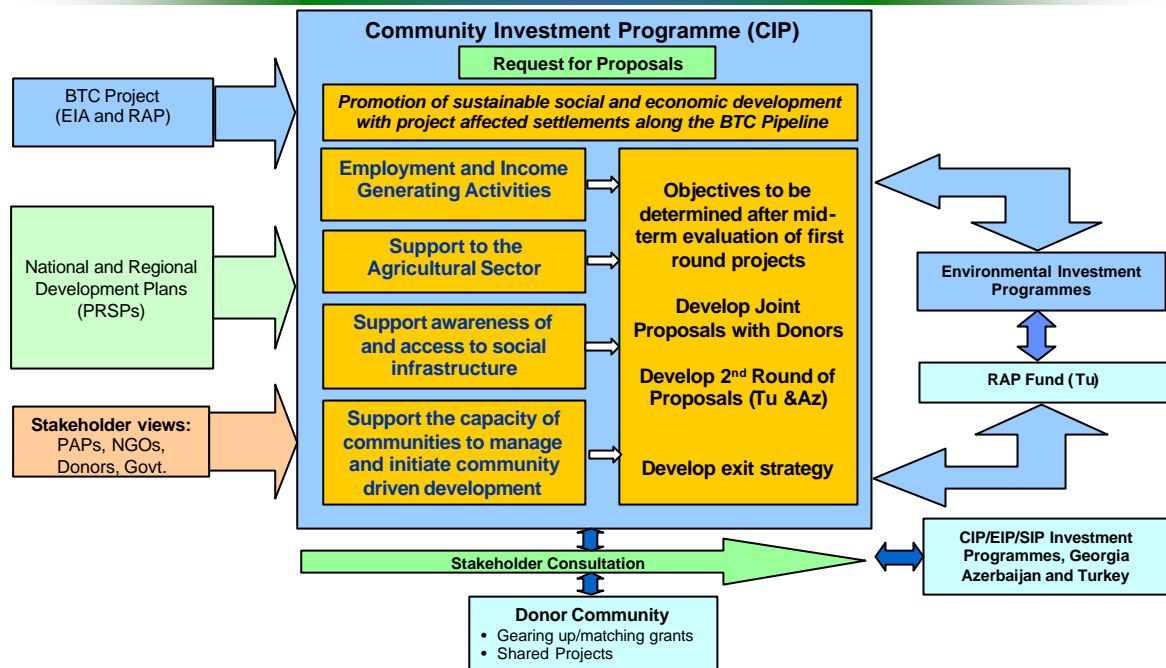
Since 2001, BTC Co. (Turkey) has consulted and held meetings with a wide range of stakeholders including project affected people, NGOs (local and international), international donor agencies and government representatives in order to contribute to the development of key themes for BTC Co.'s Community Investment Programme (CIP) plans. BTC Co.'s intent is to work with a range of implementing partners including NGOs, other civil society groups, government bodies, etc to assist in the implementation and management of its CIP in Turkey.

Proposals for the BTC Co. (Turkey) CIP have been solicited through a Request For Proposals (RFP). The RFP forms the basis of the design, implementation and management of the CIP. The first RFP (issued on Dec 20th 2002) was for US \$4 million in total – to be divided between the successful applicants. The funding guide for individual submissions is up to US \$750,000 per individual applicant, and up to US \$1.5 million in the case of consortia over three years. Applicants were asked to submit proposals for local community projects, though the main focus was on long-term sustainable programmes.

Like Azerbaijan, Turkey has adopted a two-phased approach. After a mid-term evaluation in 2004, a further RFP will be issued and will take stock of any changes in programme priorities. Successful applicants (from the first round) may re-apply for extensions and/or expansions of their existing programmes. The criteria for the extension and/or expansion through the second RFP will be set out in the appropriate RFP documentation when issued.

A summary of the process followed, inputs into the design of the CIP and linkages with other programmes are outlined below:

BTC CIP – Outline of Strategy



9.9 2.8 Selection criteria and evaluation process

9.9.1 2.8.1 Evaluation process

Applications undergo a two-tier evaluation process. The first step of the proposal review comprises members of the Project Units and the Business Unit. Applications are reviewed against pre-defined organisational, administrative, legal and financial eligibility criteria. Applications that do not meet these criteria are excluded from consideration for the second round. Debriefing is available for unsuccessful applicants to provide feedback on reasons why their proposal was not approved.

In addition to the reviewers of the first stage, the second stage includes external experts. Persons from multi-and bilateral donor organisations such as the EU, USAID, DFID, GTZ, and UNDP provide this expertise.

Reviews by both internal and external reviewers follows a detailed proposal evaluation procedure that outlines the overall evaluation process, provides definitions of the scoring mechanisms for the proposals and defines the composition of the proposals evaluation team, its functions, as well as schedules and qualifications and recommendation for award procedures. All steps of the proposal evaluation are documented in writing in order to provide for transparent and accountable processes. The approach - as presented in the table for Georgia – is broadly similar for all three

countries. External participation is by invitation and reflects external institutional competence in the field of development that is present in the respective countries.

Georgia – Terms of Reference For the Community Investment Programme Advisory Board

Composition of the Board:

1.1.1.1.1.1.1.1.1 *Participants working for: UNDP, DFID, USAID, EU, BTC/SCP representatives (hereafter referred to as BP)*

Functions:

The Advisory Board will have two key functions:

1. Monitor, review CIP activities and advise BP on the progress of the programme:

We feel that an Advisory Board will enable BP to draw upon the development expertise of the donor community in Georgia and will help to ensure that the CIP is implemented in line with international standards of best practice. This will include review of independent evaluations of the CIP that may be commissioned by BTC on the programme every 18 months.

2. Coordination of donor activity in the region:

We also feel that it is very important for the CIP activities to complement existing or planned donor activity along the pipeline route and we are keen to avoid duplication of donor efforts. An Advisory Board will facilitate a process of exchanging information on our activities on a regular basis.

Activities:

1. NGO selection:

The Board will assist with the selection of two NGO consortia to implement the Community Investment Programme. This will involve an initial screening of the top four proposals in December 2002. The top four applicants will be invited in January 2003 to give presentations to the Advisory Board after which the Board will advise BP on the top 2 consortia.

2. Review of quarterly activities:

The Board will meet quarterly to review reports made by the NGOs on the previous quarter's work, work planned for the next quarter and lessons learned.

3. Advise on the activities of the CIP:

Following the review of the CIP activities (from the quarterly presentations), the Board will provide on-going advice on improvements that can be made to the programme on issues such as reporting structures, community communication processes and other activities that will ensure the programme achieves its stated aims and objectives.

4. Independent evaluations:

The project will commission a mid-term (after 18 months) and a final evaluation of the programme (after 36 months). The Board will review these evaluations.

5. Donor coordination:

The Board members will update each other quarterly on their activities in the pipeline region. This will ensure maximum synergy between the CIP and other donor activity in the region.

Procedures:

- The advisory board will not meet as a formal body nor create any formal structures. *The role of the Board will be purely advisory. BP retains the right to use this advice as it sees fit since responsibility for the programme ultimately rests with BP as Operator.*
- **The Advisory Board will meet quarterly.**
- Each of the organisations listed above will send one representative to the board meetings with the exception of BP that may have a number of key individuals present including CIP staff.
- BP will make sure that all participants are provided with reports from the implementing NGOs a week before the meetings so that participants are well briefed before the quarterly meetings.

9.9.2 2.8.2 Selection and evaluation criteria

Selection and evaluation criteria, weighting procedures and a selection panel composed of internal and external expertise were used for proposal review and selection. Evaluation and selection of proposals in all three countries was conducted according to the following criteria:

- ❑ Management Structure / Organisational Experience
 - This includes previous project management experience, management and implementation capacity, experience with similar programmes and capacity to provide technical support
- ❑ Methodology
 - This criteria looks into the coherence of the overall project design, clarity and feasibility of the plan and its objectively verifiable indicators, the level and depth of involvement and interaction with implementing partners. Evaluation of the tangible impact on target groups and involvement of participants and communities in project design and implementation are reviewed.
- ❑ Programme Concept
 - Soundness of the proposed strategy and methodology in achieving project specific objectives, and the value added in terms of innovation and good practice are essential elements here. In addition, the proposed structure of co-operation with other implementing structures and synergies are an aspect. Consistency with the CIP strategic orientation and objectives and the coherence, appropriateness and practicability of the proposed activities are subject to review.
- ❑ Sustainability
 - The content of multiplier effects, the proposed financial sustainability as well as the institutional sustainability, the policy and structural impact are indicators for a sustainable approach.
- ❑ Budget and cost effectiveness
 - The level of detail and completeness of the proposed budget, value for money and the extent of cost sharing; matching funds and leverage are important aspects for the evaluation and selection of the proposals.

The selection criteria duly applied with consistent scoring allow the ranking of the proposals according to their 'best fit' vis a vis the objectives identified for the CIP. Applicants with proposals with the highest scores are invited to give a presentation to the review team providing an opportunity for the reviewers to clarify outstanding issues and questions. Finally, a recommendation for grant award will be made and submitted to the project management team for approval.

10.03 MANAGEMENT OF CIP AND REPORTING

10.1 3.1 Specific management and implementation plan

The implementation of the community investment programme will follow BTC Co. and BP's business processes and control procedures for managing project and partner performance and cost. Instruments for programme definition and formulation like 'Logical Framework' defining objectives, purpose, outputs, inputs, indicators, means of verification, and assumptions, will be applied to the management and monitoring of the activities.

10.2 3.2 Country-based management and implementation

Implementation of the respective CI programmes will follow the plans agreed in the respective contracts. Overall responsibility for management and implementation of the CIP and related CI-activities remains with the in-country management teams that are part of the BTC Co. management structure.³ Though the structures are slightly different in the three countries, a CIP Manager, who is responsible to the senior country management team will undertake the management of the CIP.

Community liaison officers (CLO) in the countries will provide additional support and will also supervise CIP implementation. The CLOs represent the direct link between the implementing partners, communities and construction-related parties. Implementing partners are required to submit project progress and financial reports on a periodical basis. In general, the management and reporting systems follow standards and instruments applied by development profession elsewhere.

10.3 3.3 Description of accepted proposals

10.3.1 3.3.1 Georgia

At the time of writing, Georgia is the most advanced in the process and has awarded grant agreements to two successful applicants – Care International and Mercy Corps International. A summary of their programmes is described below:

CARE International will manage implementation of the CIP in the west, specifically in Tsalka, Borjomi, Akhaltsikhe, and Adigeni districts. They are partnered with:

- ❑ Constanta Foundation who will make individual and group loans to traders, processors and small scale farmers
- ❑ Technical Assistance in Georgia who will monitor infrastructure rehabilitation and train communities in infrastructure maintenance

³ The DRAFT Georgia CIP Reporting, Monitoring and Evaluation Framework is annexed for reference.

- ❑ Curatio International Foundation who will educate communities on health care issues, particularly for the elderly, and train service providers in the health care sector
- ❑ International Centre on Conflict and Negotiation (ICCN) who will provide training and capacity building at the local level in collaborative planning and problem solving so as to build local level capacity to undertake development planning⁴

Mercy Corps will manage implementation of the CIP in the east, specifically in Gardabani, Marneuli and Tetrtskaro districts. They are partnered with:

- ❑ Constanta Foundation who will make individual and group loans to traders, processors and small scale farmers
- ❑ Technical Assistance in Georgia who will monitor infrastructure rehabilitation and train communities in infrastructure maintenance
- ❑ Curatio International Foundation who will train service providers in the health care sector, and establish a social services network for the elderly
- ❑ Elkana who will advise communities on agriculture, irrigation, animal husbandry and renewable energy

The presence of identical partners on the two teams is an advantage in terms of offering comparable services across the whole pipeline route. Having ICCN as an implementing partner in the west is appropriate given the ethnic mix of villages in those districts, while Elkana in the east is appropriate given the more intensive agriculture that is practiced in the eastern districts,

The programmes for both consortia focus on delivering direct benefits to the communities affected by the pipeline construction, and securing sustained socio-economic development through the wider lenses of partnerships and good governance. Both programmes will strengthen coordination of government, civil society and business interests, with a special emphasis on building confidence in communities so that they can address their own development priorities. Both programmes will also strengthen livelihood security and opportunities for households in the pipeline affected communities.

Some examples of specific input activities include:

- ❑ Introduce fuel efficient stoves in buildings that have been rehabilitated through the infrastructure component;
- ❑ Pilot the use of bio-gas digesters as alternative energy supply
- ❑ Provide agricultural advisory and technical advice

⁴ ICCN is part of the CARE project implementation team. Their role in the CARE set-up is to build capacity of the 'Standing Co-ordination Committees' – SCC - (village level committees comprising of village leaders, government representatives and business) to strengthen co-ordination of stakeholder by providing training in facilitation and negotiation. In addition, ICCN holds workshops with groups of SCCs to build their skills in collaborative planning and problem solving. As such, ICCN is playing a key role in CAREs programme to build capacity at the local level in order to enable them to plan and implement sustainable development activities at this level.

- ❑ Provide at least 6,000 loans to micro-businesses and agro-processors
- ❑ Create a revolving loan fund to be as a pilot to be managed by a Farmer's Association
- ❑ Establish social services networks that could address issues such as access to healthcare, transportation, safety, etc.
- ❑ Establish a pilot agricultural loan programme

3.3.2 Azerbaijan

In Azerbaijan a total of 30 proposals were received on 17th January; 17 from International and 13 from National organisations, primarily NGOs. Of these, 14 proposals made it through the first review stage and are currently being subject to more detailed assessment in Stage 2 of the review process. On 22nd March internal and external reviewers gathered and discussed individual reviews for 14 proposals that came out of Stage 1. As a result of the review process 5 proposals were finally short-listed. Short listed applicants were then invited for individual 1-hour presentations to the reviewers on 1st and 2nd April. As a result of the presentations the reviewers recommended to submit four applications to BTC management and BU GPR management for approval. Internal approval has subsequently been received. BTC is currently working on the grant agreements in order to award the four grants. Public announcement of the winners is tentatively scheduled for 28th or 29th April at the enterprise Centre in Baku.

3.3.3 Turkey

In Turkey a total number of 35 applications were received from a diverse group including NGOs, private sector, local authorities, universities, etc. on the deadline of 1st March. Only one application was from an international NGO. Of these 21 made it through the first round. After a second review, this was narrowed down to 10 proposals. On 7th April internal and external reviewers gathered and discussed individual reviews for 10 proposals that came out of Stage 1. As a result of this review 6 proposals were finally short-listed. Short listed applicants were then invited for individual 1-hour presentations to the reviewers on 14th April (the review panel included members from international donor agencies). Four proposals were finally short-listed. However, before a final decision is made a further office visit, and field/site visit will be made of the short listed applicants. A final selection will subsequently be made and forwarded to BTC management for approval. At present it is anticipated that grants will be awarded in May 2003.

11.04 MONITORING AND EVALUATION

11.1 4.1 Performance methodology and indicators

A common methodology will be applied across the countries for Monitoring and Evaluation (M&E). M&E is seen as an essential part of project management and stakeholder engagement. It helps the Project understand project progress, by learning from achievements and problems, and agreeing practical ways of how to improve both strategy and operations. The main functions of M&E are to ensure improvement-oriented critical reflection, to maximise the impact of the projects, and to demonstrate that this impact to be accountable. M&E activities are aimed at defining the extent of impact positive or negative, intended or unintended – in the lives of the project participants.

The CIP will be subject to both, internal and external M&E. All projects will be subject to a mid-term review (or appropriate review cycles according to project duration) and evaluations. Internal M&E will involve management staff and in-house expertise, while external specialists will conduct external M&E⁵.

The specific logical frameworks spell out the context of M&E through the performance indicators. These indicators are relevant for M&E and also guide management. The Project will also identify some key performance indicators across all the countries to monitor overall CIP performance.

11.2 4.2 Monitoring and Evaluation as part of CIP activities

A key aspect of the M&E systems is transparency and participation of a variety of stakeholders. Monitoring reports will be used to release information so that the flow of information supports the completion of activities and achievement of objectives.

Activities will normally see a baseline, mid-term and ex-ante evaluation of the CIP programme as a whole. The mid-term evaluation will provide information on progress in achieving specific objectives of the programme. Depending on the result activities may be adjusted if it is felt that this will help achieve project goals. The final evaluation will be used to evaluate the CIP approach for increasing sustainable community development and the success of building positive relationships between BTC Co and the communities on the route. The former will provide lessons for community development while the later provide lessons as a whole in terms of undertaking CIP type projects.

Both, the mid-term and the final evaluation will look at indicators as outlined in the logical framework that are associated with achieving specific objectives, which in turn lead to achievement of the overall project objectives. In Georgia, the NGO consortia are responsible for sharing findings of both, the mid-term and final evaluation with local stakeholders and partners.

⁵ The DRAFT Georgia CIP Reporting, Monitoring and Evaluation Framework is annexed for reference.

4.3 Reporting, Monitoring and Evaluation Framework

11.2.1 4.3.1 Reporting

Reporting, monitoring and evaluation of CIP activities in the three countries will follow a similar approach as outlined below:

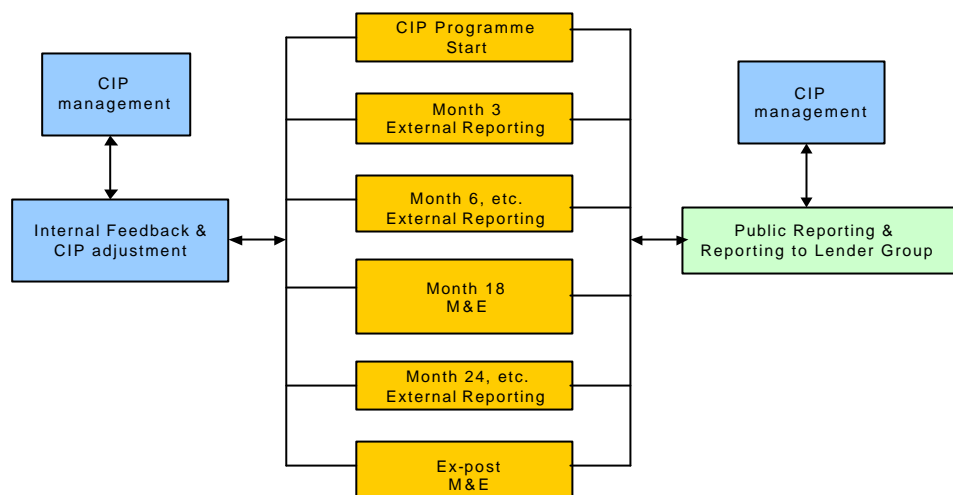
Implementing partners will be required to submit monthly reports to BTC/SCP in accordance with agreed formats. In general, the monthly report will be comprised of two sections:

- a) A quantitative section, which reports on progress in achieving targets. The targets are indicators of having achieved certain defined activities. Achievement of the activities relates to specific project out-puts. This follows the basic log-frame concept.
- b) A narrative summary, which addresses any issues encountered, actions taken to resolve the issues during the month, any unresolved issues, and a financial summary.

The monthly report will be used to track progress against a set of agreed indicators and to track any issues arising in implementation. This will allow BTC to track any slippage in programme implementation.

A quarterly or bi-annual report will also be supplied at the end of each calendar quarter or every six months. This report will mainly comprise the same sections and structure: A narrative section summarising the issues and actions of the monthly reports, b) activities that are reported on a quarterly basis only, such as detailed training records, and c) a summary of planned activities for the forthcoming quarter. The second section will report on the financial issues. In addition, an outline presentation might be requested providing a summary of progress to date, a financial status, any major issues, actions taken or planned, lessons learned, requests for assistance, and summary of planned activities for the coming quarter

This reporting may be used as a basis for discussions with the respective Advisory Boards and BTC/SCP senior management on overall programme implementation.



Annual reports will be prepared and submitted to BTC at the end of each year. While the precise format is yet to be agreed between the NGOs and BTC, it will include as a minimum a report on progress against specific objectives (as per log-frame), a financial reconciliation, and a plan of activities and expenditure for the up-coming year. These reports will be used to track progress on achieving specific objectives. BTC/SCP will provide their own six-monthly and annual reports to external parties upon request.

11.2.2 4.3.2 *Monitoring and Evaluation*

The implementing partners will conduct monitoring and evaluation workshops during the start-up phases of the respective projects to review the logical framework and means of verification with all relevant stakeholders and partners. This will provide an opportunity for all information users to define their needs. The process will outline the roles and responsibilities of each player, the frequency of M&E activities, the sources of information and more detailed account of the data collection process.

In Georgia, NGOs have already committed to undertaking quantitative and qualitative baseline surveys. A similar approach will be applied in Azerbaijan and Turkey. The baseline data will be used throughout the respective project period to document results and measure impacts. As part of ongoing monitoring activities, additional surveys and case studies may be conducted in order to provide additional feedback on whether activities being implemented are leading the project toward the desired goal.

Each CIP project will require a baseline, mid-term and ex-post evaluation. M&E indicators will be determined and participation in the data collection defined, etc.

A mid-term and ex-post evaluation will be carried out of the CIP programme in the respective countries. This will provide a view of the progress of the programme as a whole, rather than progress on individual project components of the same programme. Additionally, this will allow sharing of lessons across the CIP countries.

The mid-term evaluation will provide information on progress in achieving specific objectives of the CIP programme. Depending on the result, activities may be adjusted after the mid-term evaluation if it is felt that this will help to achieve project goals. The ex-post evaluation will be used to evaluate the CIP approach for improving sustainable community development and the successfulness of building positive relationships between BTC/SCP and the communities on the route. The former will provide lessons for the development community BTC/SCP while the later will provide lessons for BP as a whole in terms of undertaking CIP types of projects. BTC/SCP will cover the costs associated with the external mid-term and ex-post evaluations.

11.3 4.3.3 BTC/SCP CIP Management and Supervision

BTC/SCP will have Community Liaison Officers (CLOs) and LTO Assurance Advisors in the field during the construction process. They will have a dual role: First, to ensure that contractors are complying with the commitments set out in the ESIA, and secondly, in monitoring the implementation of the CIP. They will do this through regular interaction with communities.

The CIP Coordinator is responsible for the coordination of all CIP activities. This includes the management and monitoring of the CIP programmes, including budgets, schedules, and invoicing. The CIP coordinator will visit project activities in the field to provide a check on NGO reports, and to meet with relevant stakeholders to elicit their views on whether the CIP is meeting the intended goals. The CIP Coordinator may also represent BTC at community meetings on the CIP; meet with local government and other stakeholders as needed; coordinate activities between the contractor and the NGOs (in cooperation with the CLOs); liaise with regulatory agencies; provide support for external reviews; liaise with the Advisory Board to provide information on the project; and interface with the BTC representatives in Azerbaijan, Georgia and Turkey respectively to ensure consistency of approach to CIP.

12.05 CIP BEYOND 2005 – TRANSITION TO OPERATIONS

The CIP will certainly provide some useful learning for future CI operations. With the mid-term reviews scheduled for around mid to late 2004, BTC Co will have a clearer picture of the design and feasibility of successful and sustainable interventions. BTC Co will carefully evaluate the lessons learned and subsequently recommend activities

that will allow for a way forward that will safeguard the achievements and also allow for continued support to the communities and their members.

Discussions on continued CIP funding – post construction phase – are on going. At the present moment, these discussions are at an early stage and it is not possible to provide any definition of funding volumes and time period. Any announcements on this subject will be made in the respective countries and through the Project web site: www.caspiandevlopmentandexport.com.

BAKU-TBILISI-CEYHAN
PROJECT ENVIRONMENTAL INVESTMENT PLAN
Final
MAY 2003

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13.0 INTRODUCTION

13.1 Purpose of The Document

The Baku-Tbilisi-Ceyhan (BTC) and South Caucasus Pipeline (SCP) projects have chosen to support an Environmental Investment Programme (EIP) and this document represents the Project Environmental Investment Plan (PEIP). The PEIP describes the principles behind the EIP and the process used to identify and prioritise potential projects and partners for implementation under the programme. The report explains the BTC Co management and monitoring process for the EIP in addition to the internal and external monitoring and evaluation mechanisms in place for the programme. The plans for handover to operations following construction are detailed.

13.2 Scope

The EIP relates to the BTC and SCP projects and is to be implemented during the construction phase. BTC have taken the lead in the establishment of this programme. All further references to the sponsor will be in the name of BTC Co. The geographical spread is not strictly defined but is related to the areas affected by the project – Azerbaijan; Georgia and Turkey and in particular those regions through which the pipeline would pass.

13.3 Programme Rationale

There are a number of drivers for the decision by BTC Co to develop and implement an EIP:

- To demonstrate environmental leadership in the provision of additional benefits for the environment of the countries traversed by the pipelines;
- To display good corporate citizenship;
- Promote support for the pipeline projects;
- Address stakeholder concerns;
- Comply with World Bank OP4.04 Natural Habitats Policy, in particular to demonstrate that the *‘the overall benefits of the project outweigh the costs’*;
- To honour BP’s commitment and public statements on biodiversity;
- In recognition of the biodiversity value of the region.

13.4 Environmental Investment in Context

13.4.1 BPs Commitment to Biodiversity

Whilst BTC Co is responsible for the EIP, as one of the major shareholders in BTC Co. BPs policies are applied to the project. The following section details BP policies and the relationship with BTC Co. biodiversity responsibilities.

BPs commitments to biodiversity are a key element of the EIP. The BP HSE Commitment states that the goal is “...no damage to the environment”. The goals are stated as preventing pollution, managing natural resources for sustainability and continuous improvement. There are clear links between these goals and biodiversity.

Another tool that BP uses for environmental management is *Getting HSE Right* the company's HSE Management System Framework, comprising thirteen "Elements", each element comprising relevant "Expectations". There are numerous references to identifying and managing potential impacts on biodiversity throughout *Getting HSE Right*. For example, the *Facilities Design and Construction* element notes that baseline technical, environmental and health data will be collected before the development of any new operation, facility or major modification.

A publicly stated BP position and strategy on biodiversity has been developed. The BP position and commitments are as follows:

We recognise the current rate of biodiversity loss is unacceptable
We will play an important role in helping conserve biodiversity
We will take concrete actions to minimise the biodiversity impacts of our operations
We will work with others to raise the standards of our industry

In order to achieve this we commit to:

Constructively participate in and inform the debate and decision making process on access to new areas;
Respect government decisions on protected areas;
Engage others in determining the levels of performance required to conserve biodiversity in areas where we operate;
Measure, then set targets to improve biodiversity performance;
Openly report our progress on biodiversity in a transparent manner;
Openly share biodiversity information to increase society's understanding;
Maintain a strategic overview of the biodiversity implications of our global activities.

A BP corporate strategy is in place that sets out 5 elements for action:

- Responsible Operations - understand impacts on biodiversity and demonstrate continual improvement in performance
- Public Policy - contribute constructively to the public policy on biodiversity;
- External Relations - understand what is important to people; forming partnerships to develop solutions to biodiversity issues
- Conservation Projects - create collaborative partnerships, fund and contribute to conservation activities aligned with local, national, regional and global priorities;
- Research, Education and Awareness - make a positive contribution to biodiversity research and education; raise awareness and understanding of employees, people BP works with and customers.

In order to deliver on BP's commitments, biodiversity issues are considered at a number of levels:

- **National government biodiversity activities** – planning and action for biodiversity at the national level is the responsibility of government. Azerbaijan,

Georgia and Turkey are all signatories to the Convention on Biological Diversity (CBD) (1992). The CBD requires that ratifying Governments produce status reports on the condition of biodiversity within their country and develop action plans to address the key issues. These plans form the framework for action for a wide range of species and their habitats as well as for broader environmental issues such as water, air, and climate change. A Biodiversity Strategy Action Plan (BSAP) was produced for the countries around the Caspian Sea, including Azerbaijan (2002) covering marine and some terrestrial issues. A National Environmental Action Plan (NEAP) for Azerbaijan addresses priority actions for biodiversity (1998) and a revised NEAP is near completion. In Georgia a Country Study Report on the status of biodiversity was published (1997) and the BSAP (1999) is being updated. A National Environmental Action Programme that considers biodiversity issues was produced (2000). Turkey has produced a Biodiversity National Action Plan and an Interim Country Report on the Strategic Action Plan for Biodiversity in the Mediterranean Sea (1998).

All BP's and BTC Co.'s activities take account of national activities and priorities.

- **BP Regional biodiversity activities** – biodiversity action planning for all BP business interests in the Caspian and Caucasus fall under the umbrella of regional planning. The Azerbaijan Business Unit (operating division) forms part of this region. A Regional Biodiversity Action Plan (RBAP) is being developed that considers options for real, measurable and positive actions for the region. The RBAP is a joint initiative started in 2002 by BP corporate and the Azerbaijan Business Unit. BTC Co project team members provide a technical contribution to the development of the RBAP to maximise opportunities for synergies.

The action planning process for the RBAP involves:

- Consideration of the biodiversity issues of the region
- Consideration of BP's activities in the region, priorities, requirements, biodiversity risks and issues
- Consideration of the appropriate actions and opportunities based on existing initiatives, availability of expertise and resources, and priorities
- Development of a flagship conservation project as a specific example of delivering BP commitments
- Consultation and agreement on actions

The regional plan brings together those actions that are beyond compliance with individual country requirements and deals with aspects at the regional level.

- **BP Business Unit biodiversity activities** – as part of the Caspian and Caucasus Region, the Azerbaijan Business Unit undertakes a range of biodiversity activities focused on the countries in which it operates in the region i.e. Azerbaijan, Georgia and Turkey. Biodiversity planning addresses local issues and regulatory requirements and is complimentary to national biodiversity action planning. The BTC project falls within the Azerbaijan BU.

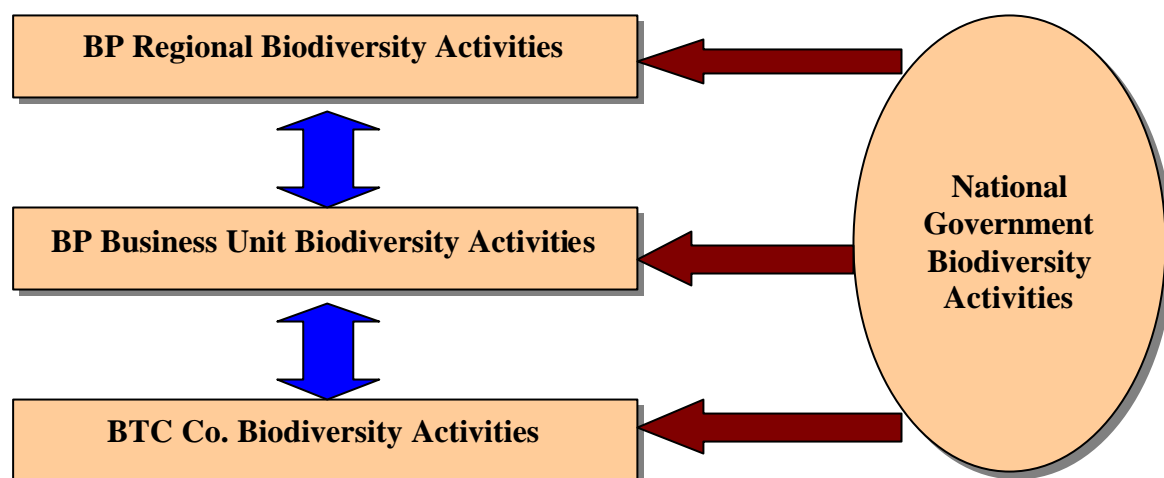
A number of biodiversity activities are undertaken by the Business Unit that are independent of the BTC project. An example is a biodiversity competition held in

2002 whereby applications for funding were invited for projects that made a positive contribution to biodiversity.

- **BTC Co. Biodiversity Activities** – as a sub-set of the Azerbaijan Business Unit biodiversity activities the BTC project has developed biodiversity commitments, including the activities to be implemented under this EIP.

The relationship between the national government and BP region, Business Unit and the project biodiversity planning activities is illustrated in the diagram below:

Figure 1: Relationship Between BP Regional, Business Unit & Project Biodiversity Planning & National Biodiversity Planning



13.4.2 Other Regional Biodiversity Activity

Being climatically and topographically diverse and because of its remoteness and difficulty of access the Caucasus and Trans-Caspian region is recognised as being of high significance for global biodiversity. As such, a number of initiatives are ongoing addressing the biodiversity of the region. These include the planning for the Conservation International Biodiversity Hotspots and the WWF Ecoregion programme.

13.4.3 BTC Community Investment Programme

The BTC Co Community Investment Programme aims to support social investment projects mainly in the form of community development, that are sustainable and that bring long-term benefits to project areas in Azerbaijan, Georgia and Turkey.

The approach is to ensure integration of the CIP and the EIP to ensure a holistic approach to the social and environmental elements with the aim of sustainable initiatives.

14.0 OBJECTIVES & STRATEGY

14.1 Objectives

The EIP has been developed to address an overall objective supported by a number of secondary aims:

The **Principal Objective** of the EIP is the delivery of actions that are of benefit in the promotion and conservation of biodiversity.

The Specific Objectives sustaining the Principal Objective are outlined in Box 1

Box 1: Specific Objectives of the EIP

Specific Objective 1

To provide additional benefits ('additionality') that go further than mitigation of impacts.

Specific Objective 2

To respond to ongoing initiatives, issues and suggestions raised by stakeholders during the consultation process undertaken as part of the pipeline projects to ensure that there are complimentary and avoid duplication.

Specific Objective 3

To achieve maximum benefit from the level of financial input.

Specific Objective 4

To maximise opportunities for wider national and international application of outcomes.

Specific Objective 5

To include international stakeholders in the development of the EIP and reporting on the outcomes of the actions.

The EIP will be implemented according to the principles outlined in Box 2. The Principles have been further developed from those detailed in the Environmental and Social Impact Assessments for each country in response to stakeholder comments.

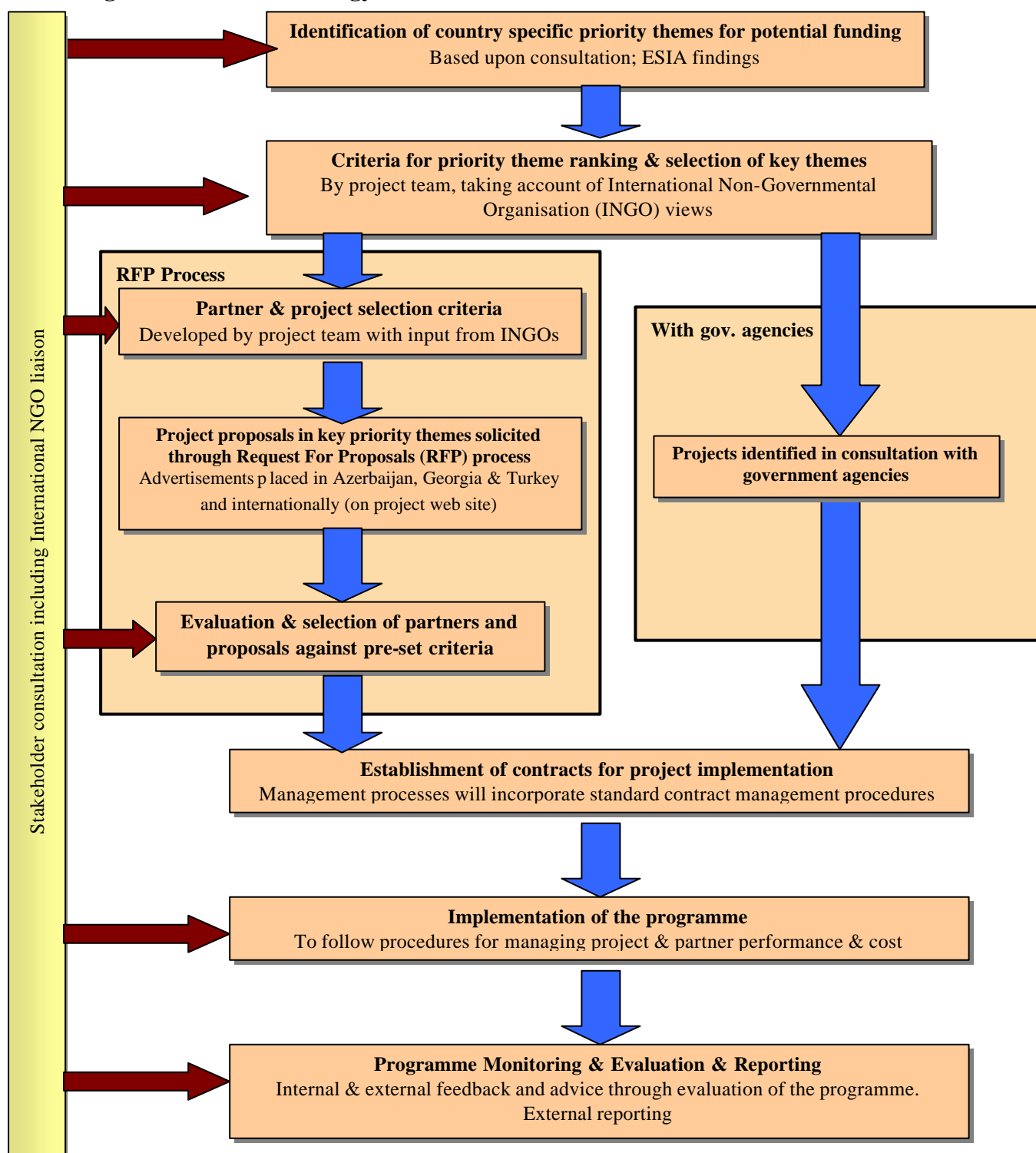
Box 2: Principles of the EIP

- **Impact:** deliver tangible benefits and go further than just direct impact mitigation.
- **Sustainability:** deliver lasting benefits.
- **Capacity building:** deliver a significant element of technology transfer and capacity building.
- **Linkages:** consider and build upon the biodiversity priorities of the host country.
- **Community Investment Programme:** links with the Community Investment Programme (CIP) to facilitate success and sustainability
- **Prevention of duplication:** avoid duplicating the efforts of companies, international and local agencies or government departments.
- **Leverage of funding:** seek opportunities to co-operate with existing organizations and programmes or leverage additional financing.
- **Participation:** take account of views, roles and rights of NGOs and local communities
- **Partnerships:** encourage the development of partnerships.
- **Monitoring and Evaluation:** strong monitoring and evaluation component with clear targets and measurements of success.
- **Transparency:** programmes and projects must be transparent and be open to internal and external scrutiny to allow potential beneficiaries, non-governmental organisations and government departments to understand the approach.
- **Implemented Under BTC Co Business Principles** – the control procedures for managing project & partner performance & cost will be applied

14.2 Strategy

A strategy has been specifically developed by the project for the EIP and is illustrated in the flow diagram below and detailed in *Section 2.3* below.

Figure 2: The EIP Strategy



14.3 EIP Process

14.3.1 Stakeholder Consultation

Consultation with a range of stakeholders in the region over a number of years has allowed BP to become familiar with stakeholder concerns. In addition, throughout the development of the EIP, consultations have been undertaken with international and national stakeholders.

In order to canvass views on the objectives, principles and process for the EIP, a Consultation Report was distributed to selected International Non-Government Organisations (NGOs). The feedback was used to refine the EIP. Comments were received mainly on the objectives and project scoring.

The consultation process will continue throughout the EIP.

14.3.2 Country Specific Priority Themes

Based upon previous stakeholder dialogue in combination with specific consultation and field studies that have been undertaken for the BTC project, a good understanding of opportunities for investment in biodiversity conservation has developed. This has enabled the identification of priority themes as potential areas for investment.

The priority themes have been developed from the following sources:

- Project Environmental and Social Impact Assessments (ESIAs);
- National plans – Caspian Biodiversity Strategy and Action Plan. Draft. (2002). Azerbaijan National Environmental Action Plan (NEAP) (1996); Georgia Biodiversity Strategy and Action Plan. MoE (1999); The Status of Biodiversity in Georgia, Country Study Report (1996); Georgia National Environmental Action Programme. Draft 1 (2000); the Biodiversity National Action Plans, Turkey; Strategic Action Plan for Biodiversity in The Mediterranean Seas. National Environmental Action Plan, Turkey
- Stakeholders – national NGOs, International NGOs, Academics, Government departments and the public.

The priority themes are included in *Appendix 1* and are summarized in *Table 1*.

Table 1: Priority Themes by Country

Azerbaijan	Georgia	Turkey
Public awareness / community involvement	Public awareness / community involvement	Public awareness / community involvement
Tougay forest conservation and restoration, Kura floodplain	Brown Bear <i>Ursus arctos</i> conservation management	Important Bird Area Programme
Spur-thighed tortoise <i>Testudo graeca</i> conservation management	Black Grouse <i>Tetrao mlokosiewiczi</i> habitat investigation, monitoring & conservation management	Black Grouse <i>Tetrao mlokosiewiczi</i> habitat investigation, monitoring & conservation management
Semi-desert pilot area conservation management	Ktsia-Tabatskuri Managed Reserve management planning	Important Biodiversity Areas (IBOAs)

Lake Jandar management & environmental centre	Borjomi -Kharagauli National Park / Support Zone	Lesser Caucasus, Forest Gap Analysis and Sub-ecoregion Study, NE Anatolia: Forest Gap Analysis Lesser Caucasus, Sub-ecoregion Study, NE Anatolia
Persian gazelle <i>Gazella subgutturosa</i> conservation management	Sustainable forest management pilot project	Forest Habitat Enhancement
Community Level Sustainable Forestry Initiatives	Tougay forest conservation and restoration, Kura floodplain	Monk Seal Research, Gulf of Iskenderum
	Wetland bird programmes	Sea Turtles, Gulf of Iskenderum
	Caucasus biodiversity planning	Monitoring bird populations in Ceyhan Delta
	Persian gazelle <i>Gazella subgutturosa</i> conservation management	Important Plant Areas
		Large Mammal Action Planning

14.3.3 Key Priority Theme Selection

Given the operational requirements, funding limitations and time, BTC Co recognises that investments under the EIP will not be able to provide assistance in all identified priority themes. As a result, a selection process has been implemented to identify the key priority themes that most closely comply with pre-set criteria. The rationale for usage of the criteria is that it allows the application of a selection process that is:

- Rigorous;
- Transparent;
- Consistent across countries.

A scoring system of 0 – 3 was applied with 0 being the lowest score. The scores were summed to provide a priority theme ranking. The selection criteria are listed in *Table 2* below.

Table 2: Priority Theme Selection Criteria

Stakeholder Alignment	Consistency with national plans e.g. Biodiversity Strategy and Action Plans. The Status of Biodiversity Country Study Reports; National Environmental Action Plans; legislation
	Consistency with regional plans/priorities e.g. Conservation International ‘biodiversity hotspot’; ‘Caucasus and Northeast Anatolia Temperate Forests’ WWF Global 200 Ecoregion; WWF & IUCN Centres of Plant Diversity - the Caucasus (Armenia, Azerbaijan, Georgia and Russia); Birdlife International Caucasus Endemic Bird Area.
	Consistency with BP corporate policies
	Alignment with local community needs
Project Aligned	Consistent with identified key areas for the project (identified through stakeholder consultation & residual ESIA/EIA impacts)
	In proximity to pipeline
Linkages	Compatibility with other ongoing / approved projects (can be consistent but not competing)
	Compatibility with CIP
Sustainability	Financially sustainable if necessary (when BP funding ends)
	Environmentally and socially sustainable (when BP funded intervention ends)

Monitoring	Tangible output (a measurable output, material product, tangible change as a result of the investment)
	Opportunity for progress monitoring
Business Value	Provision of BP and partners business (including reputation) gain (lack of risk to BP and partners)
Technology Transfer	Opportunity for wider application of methods/results/knowledge
	Prospect to be used as the basis for further projects
Geographic Range	Regional spread (of benefit to more than one of the three countries crossed by the pipelines)
Additional resources	Potential to leverage additional funding or other resources (to promote financial sustainability)

The results of the application of the screening criteria are detailed in *Appendix 2*.

The key themes in each country selected from the screening process are as follows:

Azerbaijan

- Public awareness / community involvement;
- Tougay forest conservation & management, Kura floodplain;
- Spur-thighed tortoise conservation management;
- Semi-desert pilot area conservation management;
- Persian Gazelle conservation management;
- Forest creation

Georgia

- Public awareness / community involvement;
- Brown bear conservation management;
- Black Grouse habitat investigation, monitoring & conservation management;
- Ktsia-Tabatskuri Managed Reserve management planning;
- Sustainable forest management pilot project;
- Borjomi-Kharagauli National Park / Support Zone;

Turkey

- Public awareness / community involvement;
- Black Grouse habitat investigation, monitoring & conservation management;
- Forest Habitat Enhancement;
- Lesser Caucasus, Forest Gap Analysis and Sub-ecoregion study, NE Anatolia;
- Sea Turtles, Gulf of Iskenderum;
- Important Plant Areas Project

In addition, the project will provide funds for two other elements:

- A regional project - Caucasus biodiversity planning and training.
- Provision of a series of small grants to NGOs aimed at capacity building and co-operation between national NGOs.

Whilst the key themes noted above are set for the RFP, there is the opportunity to amend the programme to react to other initiatives or new information. Any expansion of the scope of the EIP in each country would still be required to meet the key theme and project selection criteria. An amendment to the programme is most likely in

Azerbaijan where feedback during the RFP process indicates that there may not be capability to undertake projects in some of the key themes listed but that other projects may be appropriate.

14.3.4 Partner & Project Selection

Consultation and working in partnership with different organizations is considered essential to the success of the environmental investment process and implementation. A dual approach has been adopted:

- Identification of potential project partners and projects through Requests for Proposals (RFPs) for the key priority themes;
- Working with government agencies to define and implement projects within the key priority themes.

14.3.4.1 RFP Process

(a) Partner Organisation Eligibility

In order to assist with the determination of eligible partners a set of criteria have been defined to identify organisations eligible to make a submission under the RFP. Eligible organisations are those that are:

- Not-for-profit and private voluntary organisations (PVOs) officially registered with a permit to operate in each country for which a proposal is made. For those organisations that are not registered a commitment will be accepted to become registered within the timescale of agreement of contracts;
- For-profit but where the fee/profit has been waived;
- Any combination of the above in partnership;
- Produce auditable accounts;
- Either from within the country or from outside of the country for which the proposal is made but only in partnership with national organisations (national can be an international organisation with a registered presence in the country);
- Combinations of larger and smaller capacity organisations in order to enable smaller and relatively new organisations to participate;
- Proven experience in the management and/or implementation of grant-type projects or equivalent initiatives with funds of at least USD \$50,000 over the course of the project provided by or through international donor structures; Details will be required of the type, duration and timing of the project and funding sources and structure
- Able to demonstrate experience in the implementation of ecological projects;
- Able to undertake all work in a manner that protects the health and safety of all individuals who are involved in the activities. It is expected that all organisations will conform with relevant legislation and demonstrate compliance with the core spirit of BP's corporate policies on HSE.

In order to facilitate linkages between national and international NGOs contact lists of international organisations are provided in the RFP.

(b) Organisation Selection

Eligible organisations are evaluated based upon their experience and capabilities in implementing ecological projects. The following criteria are taken into account in the selection of partners:

- Extent of proven experience in the management and/or implementation of relevant projects;
- Extent of proven expertise in key sectors indicated;
- Number and capability of employed staff (organisations will be required to commit named staff to the project);
- Number and capability of key volunteer staff;
- For partnerships between international and national organisations, the extent of capacity building and technology transfer anticipated;
- Organisational ability to deliver;
- Experience of co-ordination with other initiatives.

(c) Partner & Project Identification

Once project proposals are received in response to the RFP the objective of the evaluation exercise will be to compare the submissions on a fair and equal basis and arrive at an overall ranking. A two stage analysis will be undertaken, first to evaluate the partners and projects within each country and secondly to assess the partners and projects across the project countries.

The country evaluation team will comprise a small number of key decision makers covering the technical and commercial aspects. The in-country evaluation process will cover three distinct elements i.e.

- Potential Partner Analysis – to identify the suitability of the organisations, identify the eligibility of organisations and select the most appropriate organisations, as defined by the criteria described in *Section 7*
- Commercial Analysis – comprehensive cost and commercial review of the rates and prices
- Technical Analysis – comprehensive technical review of projects in accordance with the criteria listed below.

The draft technical analysis criteria below have been developed to provide an indication of the areas to be addressed in the partner and project evaluation. These criteria are based on those developed for the priority theme selection. They will be refined and weightings developed in response to consultation feedback.

Box 3: Draft Project Technical Evaluation Criteria

Criteria
Stakeholder Alignment
Consistency with identified priority themes
Linkages
Compatibility with other ongoing / approved projects (can be consistent but not competing)
Compatibility with CIP
Sustainability
Financially sustainable if necessary (when BTC Co funding ends)
Environmentally sustainable (when BTC Co funded intervention ends)
Monitoring
Tangible output (a measurable output, material product, tangible change as a result of the investment)
Opportunity for progress monitoring
Business Value
Provision of BTC Co and partners business (including reputation) gain (lack of risk to BTC Co)
Capacity building/Technology Transfer
Opportunity for wider application of methods/results/knowledge
Prospect to be used as the basis for further projects
Level of local involvement
Degree of local capacity building
Geographic Range
Regional spread (of benefit to more than one country)
Additional resources
Potential to leverage additional funding or other resources (to promote financial sustainability)
Project Staffing
Project team capability
Team experience
Team technical expertise
Project management - organisation structure

Once this first stage review has been undertaken a further analysis will be completed to:

- Ensure synergies across the three countries involved; and
- Maximise linkages with on-going regional projects.

This will be undertaken on a technical basis only.

14.3.4.2 Government Agency Projects

A number of projects under the priority themes are optimally implemented by working in combination with government agencies. Such projects are those that will require government procedures to be implemented or those that could be undertaken in conjunction with existing programmes to maximise synergies between the initiatives.

14.3.5 Establishment of contracts for project implementation

Under the RFP process, once successful proposals have been selected, refinements will be negotiated if necessary and contracts established. Other contracts will be developed as necessary with government agencies or their agents.

14.3.6 Programme Implementation

The project implementation programme will be dependent upon the nature and scale of the projects selected

14.4 EIP Budget

The scale of investment in each programme will depend upon a number of factors including whether:

- The selected projects form elements of larger programmes;
- Leveraging additional funding;
- Availability of in-kind resources;
- Spread of projects to be supported.

For example, it is likely that as part of the EIP, BTC Co. will co-fund a tougay forest project in conjunction with the BP Regional Biodiversity Action Plan initiative. There will also be co-funding of projects between the BTC midstream project and the Azeri-Chirag-Gunashli (ACG) upstream project.

BTC Co has identified resources that are to be allocated to the EIP. The EIP allocations compare favourably when benchmarked against relevant national and international projects of similar magnitude and profile.

The funds pledged for Azerbaijan and Georgia, and Turkey respectively are detailed in the table below

AZERBAIJAN	GEORGIA	TURKEY	TOTALS
Total: US \$2.7 million	Total: US \$3.0 million	Total: US \$3.05 million	Total: US \$8.75 million

14.5 Management of EIP & Reporting

14.5.1 Cross-Country Management

The overall EIP process is managed by a Project EIP Manager. This role acts as the link between the project Core Management Team (CMT) and the in-country teams to provide assurance that the Programme is following BTC Co business processes and control procedures for management of performance and costs.

Progress on EIP forms part of the monthly assurance monitoring.

14.5.2 Country-based Management & Implementation

Overall responsibility for the management and implementation of the EIP lies with the in-country management teams that are part of the BTC Co management structure. Specifically, EIP management is the responsibility of the Country EIP Manager.

National and international organisations will be the implementing agents in all three countries. The implementation arrangements will vary between countries dependent upon the projects and selected partners.

14.5.3 Non-Compliances

Non-compliances either in the programme or project implementation will be identified and corrective action implemented if required. The corrective action that will be taken is dependent upon the nature and significance of the non-compliance. For example, non-compliances in terms of cost control or contract management by implementing partners will be dealt with under the contract management mechanisms in place for the BTC project.

14.6 Monitoring & Evaluation

A structure and programme for project monitoring and evaluation will be in place. This will ensure that:

- The projects are being implemented in a cost effective and technically robust manner in line with BP's ethical, contracting and business principles;
- The programme progresses against the stated objectives and principles;
- Other opportunities that become evident are evaluated;
- The projects can be subject to revision in response to findings; external developments etc.

Monitoring and evaluation will comprise of internal and external aspects. Internal monitoring will be undertaken by management staff and in-house expertise. Internal monitoring will include that for project implementation costs. In Azerbaijan a staff member has been appointed to manage both CIP and EIP costs. In Georgia and Turkey this would be undertaken within the existing BTC Co. contract management structure.

It is expected that national and international NGOs will provide the external monitoring programme. A common methodology and techniques will be applied across the countries.

The monitoring frequency will be determined by the programme elements.

Implementation reports and monitoring reports will be produced for external audiences.

The details of participants, timing etc are still to be determined but the following principles will apply to the external input required at various stages:

(I) Proposal Review

International NGO(s) would be involved across the countries during the second stage of proposal review i.e. of the short-listed proposals after the first screening.

The aim will be to:

- Provide technical assistance in proposal evaluation; and
- Assist with providing transparency to external stakeholders;
- In Azerbaijan it is likely that there would be a specific additional involvement in pulling together a coherent package of smaller projects.

The mechanism for involvement will be to:

- Score proposals against the pre-set criteria;
- Advise on strategic elements across countries and of the programme.

(II) Programme Implementation

INGO(s) will be involved in an overview role of the programme implementation across the three countries as Programme Monitors.

The aim will be to monitor whether the programme is meeting the stated objectives.

This will be achieved through the production of independent reports that are circulated to interested stakeholders and put on the project web site.

It is likely that this level of monitoring will be undertaken annually based upon progress reports produced by the implementing partners and by Project Implementation Monitors (see III below) and site visits.

The Programme Monitors will supply their findings to the EIP Country Managers and the Project EIP Manager for review and appropriate action if necessary.

(III) Project Implementation - Technical

National NGOs or international NGOs with a country base would be involved in the technical review of each project. Consideration is being given to the involvement of academics but there is a concern that academics may not be sufficiently conversant with the principles behind the EIP and the need for tangible results.

In view of the diversity of themes it is likely that there will be a specific technical monitor for each project or group of projects under a key theme.

The project specific technical monitor will be supplemented with an in-country programme monitor.

The role is two-fold:

- In-country technical monitoring of project implementation;
- In-country monitoring of programme implementation.

The monitoring will take the form of:

- Review of progress reports from implementing organisations;
- Field visits if necessary;
- Discussions with implementing agencies to review results and progress;
- Review of progress against identified targets for each project.

The monitoring team will produce reports, including reporting on measures of progress / success. The reports will be supplied to BTC Co (the EIP Country Managers and the Project EIP Manager) and the overall programme monitoring team for evaluation and appropriate action if necessary.

It is envisaged that the Project Implementation Monitors will undertake a review every 6 months. The frequency will depend upon the nature of the project in terms of such factors as duration; seasonality; speed with which results are gained.

14.7 Transition to Operations

One of the principles of the EIP is that the benefits are sustainable. Funding is due to finish in 2005. It is, however, feasible that projects may continue after this period. This will be dependent upon a number of factors including leverage of other funding; position of project in relation to other initiatives; the use of the EIP funding as 'seed

14.8 Programme Status

The table below provide a timetable for implementation of the EIP in each country with a brief summary for each country following:

Table 3: Programme Status (as at late April 2003)

	Azerbaijan	Georgia	Turkey
Advertise for project proposals to organisations	21 st February 2003	May 2003	21 st February 2003
RFP Clarification meeting(s)	10 th March 2003	June 2003	25 th & 26 th March 2003
Proposal return date	15 th April 2003	Late June 2003	17 th April 2003
Proposal review & project selection	mid-April – mid-May 2003	June – July 2003	mid-April – mid-May 2003
Internal contracts procedures	May – June 2003	August 2003	May – June 2003
Start project implementation	June 2003	August 2003	June 2003
Liaison with government agencies	May – July 2003	May – July 2003	-

Azerbaijan

The RFPs were issued in February as hard copy and on the project web site. Interest was high at the clarification meeting held in March. Twenty-three proposals have subsequently been received and are under review against the pre-set criteria for partner and project eligibility. Four proposals were received from international organisations, 6 from academic institutions in Azerbaijan and the remaining thirteen from local NGOs. A cross-country evaluation will be undertaken with Turkey in May. It is expected that contracts will be finalised in June – July 2003.

A tugay forest project is being undertaken in co-operation with the BP Regional Biodiversity Action Plan initiative. A Working Group has been established comprising representatives from BP Corporate and the BTC project. The inaugural meeting identified the need to locate an international forestry expert to provide advice in combination with local scientists.

An initiative will be undertaken involving semi-desert conservation that builds upon the Strategic Environment and Cultural Heritage Management Plan for Gobustan initiated as part of the offset measures for the Gobustan area. A response is awaited to letters of introduction for the idea sent to both the Ministry of Environment and Natural Resources (MENR) and Ministry of Culture.

A contribution will be made to the spur-thighed tortoise conservation and breeding programme initiated by the ACG project.

Georgia

RFPs are currently in preparation for Georgia to be advertised in June.

The initiative regarding the Ktsia-Tabatskuri Managed Reserve will build upon the management planning assistance being provided to the government of Georgia. Once this has been defined the precise nature of the additionality element can be confirmed.

Discussions are to be initiated with the State Department of Forestry in order to determine an appropriate programme for the sustainable forestry key theme. In particular synergies are to be investigated with the GEF funded forestry programme.

Turkey

Following issue of the RFPs in February two clarification meetings were held in Istanbul and Ankara in March. The meetings were well attended and the response generally very positive to the initiative. Proposals have been received from a range of parties and are under review. It is expected that contracts will be finalised in June – July.

Cross-Country

The development of the Caucasus biodiversity planning initiative is being progressed through discussions with INGOs.

APPENDIX 1

PRIORITY THEMES



Priority Themes

(I) Regional Project

Caucasus biodiversity planning – adequate planning and implementation of conservation activities and sustainable use of natural resources is important for the maintenance of biological diversity. In order to facilitate this, the necessary institutional and incentive framework needs to be in place. Opportunities exist in the development of Caucasus wide information management systems and analysis tools to provide adequate databases to identify priority actions. Such a database was not available in the planning of the BTC project but would be of value in allowing evaluation of the significance of resources and potential impacts on these resources. Provision of training would be another potential element of a programme. The GEF funded Georgia Protected Areas Development Project is addressing institutional capacity building and provides some potential for linking with an initiative for biodiversity planning funded under the EIP.

(II) Azerbaijan

The Azerbaijan priority themes have been identified from the following sources:

- ESIA's;
- National plans – Caspian Biodiversity Strategy and Action Plan. Draft. (2002). National Environmental Action Plan (NEAP) (1996);
- Stakeholders – national NGOs, International NGOs, Academics, Government departments and the public.

The priority themes from which preliminary key themes have been selected are as follows:

- **Public awareness / community involvement** – there are a number of threats to biodiversity conservation in the region, many of which are due to anthropogenic pressure. Whilst it is necessary to take account of the levels of poverty of much of the population and their priority needs, sustainable resource use can be facilitated through an increase in environmental awareness. This applies to such land management issues as grazing levels; forest use and water management. Public support would also assist the implementation of projects under the EIP, and help ensure that the correct balance between socio-economic needs and the EIPs are maintained. Potential synergies exist with work undertaken as part of the CIP.
- **Tougay forest conservation and restoration, Kura floodplain** – forests are relatively scarce in Azerbaijan, especially along the pipeline corridor. River floodplains previously supported comparatively significant areas of tougay (tugai) forest. Such forest areas have declined due to local logging for fuel-wood; conversion to agricultural land; management of the river system that no longer floods on a regular basis and other anthropogenic impacts. It is one of the priorities of the Republic National Environmental Action Plan of Azerbaijan to re-instate tougay forest along the Kura River. Initiatives could be carried out in combination with those in Georgia. Whilst the Kura River is crossed twice by the

pipeline route the routing process has ensured that no tougay forest is crossed. Fragments of tougay forest exist in proximity of the pipeline.

- **Spur-thighed tortoise *Testudo graeca* conservation management** - this species is listed by IUCN and is included in the red data book of Azerbaijan. The population is relatively high within Azerbaijan but they are very susceptible to persecution (e.g. hunting; abuse) and other anthropogenic impacts. As part of the ESIA studies, the spur-thighed tortoise was recorded frequently in the desert, semi-desert and scrub habitats, mainly in the west of the proposed pipeline route and particularly the Shamkir region. A tortoise breeding and conservation programme is being undertaken as part of the environmental investment activity associated with the upstream project, providing an opportunity for a combined effort.
- **Semi-desert pilot area conservation management** – semi-desert habitats are relatively common within Azerbaijan but many areas are degraded due to anthropogenic influences such as over-grazing, military activities and agricultural conversion. Sympathetic management of degraded areas, particularly within the framework of protected areas would provide a potential pilot project for application elsewhere. The pipeline corridor crosses semi-desert areas at a number of locations along the route, particularly in the east.
- **Lake Jandar management & environmental centre** - Lake Jandar is a cross-border lake that is recognised as having high potential for avifauna but is somewhat degraded. A bird monitoring programme has been undertaken as part of the operations management for the Western Route Export Pipeline (WREP). These studies have noted that whilst the lake does not support particularly diverse habitats it does support a good variety and number of waterfowl during autumn and also a diverse assemblage in winter. It has been reported that the lake has been proposed as a Ramsar site by the Azerbaijan government but latest information indicates that this is not the case, although the lake was included in a book of potential Ramsar sites of Azerbaijan. The nature and status of this agreement is being investigated. The lake is approximately 3km north of the pipeline route at the Azerbaijan – Georgia border.
- **Persian gazelle *Gazella subgutturosa* conservation management** – the species is listed in the Red Data book of Azerbaijan. It is a species that inhabits arid steppes and semi-desert and that has been affected by habitat loss due to agricultural intensification, in particular the conversion of semi-natural habitat for sheep grazing and the effects of over-grazing. The species is also susceptible to poaching/hunting. The population is restricted to a limited number of localities. There is the potential for management of the existing populations and expansion to additional areas managed for the species. This would be undertaken in conjunction with work in Georgia. One area of refuge for the Persian gazelle is the Korchay Reserve, which the pipeline corridor has been routed to avoid. The southern boundary of the Korchay Reserve is approximately 3km north of the pipeline corridor.
- **Community Level Sustainable Forestry Initiatives** - One of the main threats to biodiversity in Azerbaijan is the pressure logging for firewood and cooking

purposes has on natural forests and other wooded areas. Whilst it is necessary to take account of the levels of poverty, access to energy and other priority needs, community based sustainable forestry projects will, over time, provide a renewable source of firewood and divert pressure away from natural forests which often support important flora and fauna. The need to address forest issues is one of the key points in biodiversity planning in the country.

(III) Georgia

The Georgia priority themes have been identified from the following sources:

- ESIA's;
- National plans – Biodiversity Strategy and Action Plan. MoE (1999); The Status of Biodiversity in Georgia, Country Study Report (1996); Georgia National Environmental Action Programme. Draft 1 (2000)
- Stakeholders – including World Wide Fund for Nature (WWF); Georgian Centre for the Conservation of Wildlife (GCCW); Noah's Arc Centre for the Recovery of Endangered Species (NACRES); Birdlife.

The priority themes from which preliminary key themes have been selected as potential funding topics are as follows:

- **Public awareness / community involvement** – as with Azerbaijan, a public awareness /community involvement initiative would facilitate sustainable resource use and support for project implementation. One of the goals of the Georgia Biodiversity Strategy and Action Plan (BSAP) (Ministry of Environment [MoE], 1999) is to: *'Increase biodiversity awareness and improvement of environmental education at all levels'*. One of the strategic components to achieve the goal of conservation of biodiversity and sustainable use of biological resources is given as *Public awareness and community participation* and it is recognized that *'Local support is essential for any conservation initiative. Raising awareness among local communities, maintaining transparency and keeping them well informed about the planned or on-going conservation programs and projects will encourage their participation'*. A further strategic objective is *Education related to biodiversity conservation* whereby education is acknowledged as an *'important tool for gaining public support and ensuring their involvement in conservation activities as well as in sustainable use of biological resources.'* The National Environmental Action Programme (NEAP) (MoE, 2000) suggests activities in environmental education and public awareness.
- **Brown Bear *Ursus arctos* conservation management** – the species is noted as Endangered in the Georgian Red Data Book. The main threats to the species are hunting (for, fur, fat, meat and bile) and the taking of cubs for display or as pets and loss of habitat. Population estimates for the species vary. The Status of Biodiversity in Georgia, Country Study Report (UNDP, 1996) notes that recovery of species numbers would be aided by the development of adequate legislation and the strict control of hunting and of capturing cubs. Whilst not detailing particular species, the BSAP considers species and habitat conservation as one of the strategic components. The NEAP also identifies conservation of rare and

endangered species as a priority direction. The route of the pipelines passes through forest and meadow areas that are used by the species.

- **Black Grouse *Tetrao mlokosiewiczi* habitat investigation, monitoring & conservation management** – the Caucasian Black Grouse currently considered as a globally threatened species, is listed by BirdLife International as a Species of European Concern, category 2 with status “Insufficiently Known” and as a Restricted Range Species and is in the 1996 IUCN Red List with the status of Data Deficient. It is also listed in the Red Data Books of Georgia, Armenia, Azerbaijan, Russia, Turkey and Iran as a rare bird whose number is declining. It is poorly studied due to the limited range, difficulty of access to its high mountain habitat and the relatively small population. A number of stakeholders have identified it as a key species. Further research is required in order to determine population size and distribution and habitat requirements. The pipelines would cross an area of high-altitude rhododendron scrub that forms part of the area used by Black Grouse for breeding.

- **Ktsia-Tabatskuri Managed Reserve management planning** – the Reserve has temporary boundaries awaiting the production of a management plan. There is also no active site management for conservation. The development of a protected areas system is a goal and one of the strategic components of the BSAP. It is considered that: *Development of protected areas system is a major tool for conserving biodiversity and for ensuring sustainable use of natural resources. Apart from pristine natural systems, protected areas will also include disturbed areas and will cover a variety of important habitats to serve as refuges for as many threatened species as possible. Protected areas system will facilitate rehabilitation of degraded ecosystems and are expected to contribute to the country’s economical development and welfare of local communities.* (1999). The development and management of the protected area system in Georgia is also recognized as key by the NEAP. GEF is currently providing funding of \$8.7 million for a Protected Areas Development Project in Georgia. The project will provide financial and technical assistance to (i) support protected areas planning in the Central and Eastern Caucasus; (ii) establish protected areas management and build awareness of biodiversity conservation at three sites in the Eastern Caucasus; and (iii) reorganize and strengthen the Department of Protected Areas to conserve and manage biodiversity. Actions under the EIP for the Ktsia-Tabatskuri Managed Reserve would maximise opportunities for linkages with this programme. The reserve would be crossed by the pipelines for a distance of approximately 21km.

- **Borjomi-Kharagauli National Park / Support Zone** – the Borjomi-Kharagauli National Park was designated in 1995. The main purpose of the designation is the conservation of existing ecosystems; restoration of degraded areas; facilitation and control of sustainable use of renewable resources; awareness / educational activities and ecotourism. The Park is divided into a number of zones: core zone (strict nature protection zone); wilderness zone; traditional use zone; recuperation zone and support zone (covering the five Districts that share a common boundary with the Park). The National Park covers primary forest and sub-alpine meadows typical of the central region of the Lesser Caucasus. The Park supports a good variety of flora and fauna including several rare and endangered species, relic

species and species endemic to the central Caucasus region. The Support Zone consists of various land uses including agriculture, industry, infra-structure and areas of natural and semi-natural habitat. The rationale for the establishment of the Support Zone is to secure the support of park neighbours for the sustainable protection of the park. The proposed route crosses the Support Zone for the Park for approximately 39 km. The governments of Germany and Georgia have a bilateral agreement regarding financial co-operation for the project concerning 'Environment and Protection of Natural Resources Borjomi-Kharagauli National Park'. The German government provides funds for three programmes in the Park - implementation of infrastructure; training/education and a Support Zone development programme. There are potential linkages with initiatives under this scheme.

- **Sustainable forest management pilot project** – Georgia supports extensive areas of forest, 40% of the land area being covered by mainly deciduous forest. There are significant anthropogenic threats both in the form of large-scale illegal logging and small-scale logging for fuel-wood. One of the goals of the Georgian Biodiversity Strategy Action Plan is the promotion of sustainable forestry. In addition, the NEAP identifies forests and forestry as one of the priority environmental problems. A GEF funded (US \$ 26.05 million) Georgia Forestry Development project is currently being implemented. The main objective is the establishment of sound forest management systems that would maximise the contribution of Georgia's forests to economic development and rural poverty reduction on an environmentally sustainable basis. The forest project would also take account of the habitat requirements for fauna such as brown bear. Any project funded by the EIP would be closely aligned with the Forestry Development Project. Two main areas of forest fragments would be affected by the pipeline route – at Tetrtskaro and from Thsratskaro Pass – Sakire. The area of forest affected amounts to 96 hectares.
- **Tougay forest conservation and restoration, Kura floodplain** – whilst Georgia does not have the same paucity of forest as Azerbaijan, there has been a significant decrease in the area of tougay forest; again particularly along the Kura River, due to the same influences that affect the forest in Azerbaijan. Re-instatement of tougay forest has been identified as a priority by the Georgian government. According to Decree no. 10/63 from the Chairman of State Department of Forestry of Georgia (September, 2002) the status of "area of special functional value and landscape" has been assigned to floodplain forests. Special functional value is allocated to enable the enforcement of regulations aimed at the protection and improvement of biodiversity, features and functions. No areas of tougay forest would be crossed by the pipeline route. Evidence of former tougay forest is present at the crossing of the Algeti River; western crossing of the Mtkvari and the first crossing of the Potskhovi River.
- **Wetland bird programmes** – the Caucasus region provides a number of migratory flyways and sites for wintering birds. In particular the Javakheti region supports a series of water-bodies and wetlands that can act as one inter-related unit. Part of this area has been proposed as a Ramsar site. Limitations on access, partly as a result of political sensitivities during Soviet times, mean that there is relative scant information on this area. Sufficient baseline data would be able to

assist with the development of suitable management programmes to enhance the value of the region. The route has been optimised to avoid crossings of wetlands as far as possible; it does pass in close proximity to high-altitude wetlands at Mount Tavkvetili, Narianis Veli and Ktsia Valley.

- **Persian gazelle *Gazella subgutturosa* conservation management** - the species is noted in the Georgian Red Data Book. The historical range covered southeast areas of Georgia in particular the Gareji desert, Shiraki steppes, Iori Plateau. It is now extinct in Georgia although a few individuals occasionally visit from Azerbaijan, but do not settle. The Georgian BSAP recommends captive breeding and reintroduction of species of high categories of threat and specifically refers to the species Persian gazelle. The species does not occur in proximity to the proposed pipeline route.

(IV) **Turkey**

The Turkey priority areas have been identified from the following sources:

- ESIA's; Public Consultation and Disclosure
- National plans – the Biodiversity National Action Plans, Turkey; Strategic Action Plan for Biodiversity in The Mediterranean Seas. National Environmental Action Plan, Turkey
- Stakeholders – including The Turkish Foundation for Combating Soil Erosion, for Reforestation and the Protection of Natural Habitats (TEMA), Turkish Marine Research Foundation (TUDAV), World Wide Fund for Nature (WWF), Society for the Protection of Nature (DHKD), Birdlife International, and European Union.

The priority areas identified are as follows:

- **Public awareness / community involvement** – a public awareness/community involvement initiative is under consideration as with Azerbaijan and Georgia. Tools developed for the initiative would be applicable across the three countries with refinements for each country.
- **Important Bird Area Programme** - IBAs are of ecological significance for a number of reasons and are:
 - critical sites for the conservation of birds and biodiversity;
 - places of international importance;
 - practical targets for conservation action;
 - selected according to standardized and internationally recognised criteria;
 - used to reinforce existing protected area networks;
 - used as part of a wider approach to conservation.

Sites must, wherever possible, be amenable to conservation and to being delineated from surrounding areas, and be large enough to support viable populations of the species for which they are important. Potential IBAs within proximity to the BTC route in Turkey include Kuru Lake (Sivas, KP653). The lake is large and shallow with extensive reedbeds. The site supports breeding red-

necked grebe and common crane. The site is not well understood and survey is required to evaluate the avifaunal importance. Monitoring in this, and other areas, may lead to the identification of new IBAs.

- **Important Biodiversity Areas (IBOAs)** - new work is beginning in 2003, to look at the biodiversity of IBAs with a view to establishing Important Biodiversity Areas (IBOAs). This is an international initiative with Turkey acting as the pilot for the scheme in Europe. Birdlife Turkey is currently carrying out desk based work in preparation for this study. Further monitoring at existing IBAs along the BTC route (Erzurum, Ardahan, Aygir, Ulus, Yumurtalik) would contribute to the IBOA initiative. Potential areas are:
 - Ulas lakes, Sivas, KP713. These five lakes lie between 1 and 5 km from the BTC route. The IBA (TR118) is designated on the basis of the presence of breeding globally-threatened White-headed Duck.
 - Yumurtalik lagoons (TR079). The area is a huge complex of brackish and saline lagoons, salt and freshwater marshes, mudflats, reed beds, sand dunes, and is extremely important for breeding, wintering and migrating birds.
- **Black Grouse *Tetrao mlokosiewiczi* habitat investigation, monitoring & conservation management** - similarly to Georgia a number of stakeholders identified this as a key species. Any initiatives for the species would be undertaken as a combined effort for the two countries.

The forest edge/sub-alpine meadows with rhododendron scrub are the main habitat of Caucasian Black Grouse. The Posof Wildlife Protection Area (c. 43,375 ha) has been established primarily to conserve this species. However, as reliable population estimates are lacking, the size of the Protection Area has been maximised to protect as much suitable habitat as possible given the grouse's globally-threatened status.

There is currently no management plan for this protected area and as such the site is not included on the United Nations List of National Parks and Equivalent Reserves.

- **Lesser Caucasus, Forest Gap Analysis and Sub-ecoregion Study, NE Anatolia** - this project presents possibilities for synergies with respect to activities in Georgia and elsewhere in the region, and with the CIP in Turkey.
 - **Forest Gap Analysis.** A Forest Gap Analysis programme is being carried out for each region, subject to the availability of funds. Current study sites include an area in the SW of Turkey, which is in cooperation with the Ministry of Forestry. It is estimated that a Gap analysis for one sub-region, would take between 2 ½ to 3 years, and would involve an assessment of the biodiversity values, conservation status, and threats concerning all different forest types. The objective is to identify gaps (i.e., vegetation types and species that are not represented in current reserves) that may be filled through the establishment of new reserves or changes in land management practices. The eventual outcome of the analysis would be to identify 'hot spots' for

legal protection. NE Anatolia in particular was stated as an area that was little known and understood, and specifically identified the Lesser Caucasus region in Turkey as a possibility.

- **Lesser Caucasus, Sub-ecoregion Study, NE Anatolia.** A Forest Gap Analysis report, together with a socio-economic study would provide the baseline information required to complete a Sub-ecoregion study. A socio-economic study would take between 2-3 months. The objective would be to make forest conservation relevant to local communities. The work would comprise consultation with stakeholders and the development of a Sub-Ecoregion Action Plan.
- **Forest Habitat Enhancement** - the section between the Georgian Border and Sarikamis marks a transition between the humid Euro-Siberian and the more arid Irano-Turanien phytogeographic regions. The flora is dominated by Scot's pine forest, but where cutting has degraded the conifer forests, the better regeneration properties of aspen and sessile oak have led to these forest types becoming locally dominant. The extreme north-eastern part of the region falls fully within the 'Colchice Floristic Province' characterised by very dense vegetation arising from the humid climate with its heavy precipitation, and the presence of many relict species of pre-glacial origin, e.g. Caucasian spruce, Balkan maple, and species of rhododendron, gentian and lily.

Precipitation levels in Posof and Sarikamis are similar but in Posof, rain falls throughout the year, while in Sarikamis it falls almost solely in winter. As a result, Caucasian spruce that requires summer rain is present only around Posof. The Scot's pine forests around Ardahan and Sarikamis are generally less diverse, however, they are important because they represent the only Scot's pine forests in Turkey that grow in a continental-type climate. The mammalian and ornithological fauna remain important and include European Lynx; Roe deer; Eurasian Brown Bear and the Caucasian Black Grouse.

The results of the Forest Gap Analysis could be used to identify areas for habitat enhancement measures.

- **Monk Seal Research, Gulf of Iskenderum** - the Mediterranean monk seal is the only seal occurring in the Mediterranean Sea and is described as 'critically endangered' in the IUCN Red List of Threatened Species. The monk seal is protected under CITES, the Bonn Convention, the Berne Convention, the EU Habitats Directive under Turkish Terrestrial Hunting Law.

It is estimated that at least 50 monk seals presently live on the shores of Turkey. The primary habitat type is remote and undeveloped rocky shores and caves. Monk seals have been recorded along much of the Mediterranean coast of Turkey to the Syrian Border, with the exception of the coastline from Mersin to Iskenderun. Interviews with local fishermen in the Gulf indicate that monk seals have been seen along the coast at Yumurtalik and Sugoza. A study on the monk seal would need to last for approximately 2 - 3 years and could comprise: baseline research, conservation, and promotion and public awareness.

- **Sea Turtles, Gulf of Iskenderum** - the evidence from the ESIA turtle surveys undertaken during the summer of 2002 indicate that egg and hatchling predation constitute a significant threat to the reproductive success of sea turtles in the Gulf of Iskenderum. The numbers of green and loggerhead turtles recorded during the survey were found to be appropriate for a possible nest protection scheme. The objective of the project would be to combine hatcheries protection with the existing Monitoring Programme to reduce the impacts of anthropogenic and predatory pressures on the green turtle and loggerhead turtle in the Bay. Turtle nesting on the BOTAS beach could be safeguarded by such measures as the collection of laid eggs; the establishment of a protected hatchery area within the beach area and actions to discourage predatory species.

Other possible studies include an orientation study, which involves monitoring directions that hatchlings take upon leaving the nest, and a tagging and tracking study using satellite tracking equipment to determine migration routes, dive depths etc.

- **Monitoring bird populations in Ceyhan Delta** - a three year EU research project on the biodiversity of the Cukurova Delta has been conducted. The project has produced baseline data on many groups of organisms but with the current funding ceasing this year, it is not clear how the database will be maintained. It is envisaged that a further 3 years are required involving local scientists and conservation organizations. This could:
 - determine whether the BTC construction might influence local wildlife and indicate how localised these effects are;
 - provide some post-construction monitoring data to evaluate longer term effects;
 - improve the knowledge and understanding of the local population.

The project could involve:

- continued monitoring of bird populations in Tuzla, and
- an extension of monitoring to the whole Ceyhan Delta using Geographic Information Systems (GIS). The Mediterranean Sea is one of the global biodiversity hotspots, thus it is very timely to maintain existing conservation activities in this area.
- **Important Plant Areas** – Planta Europa is promoting the creation and protection of Important Plant Areas (IPAs) as a complement to BirdLife international's Important Bird Areas (IBA) programme. It is intended that IPAs be a significant component of the Council of Europe's Pan-European Ecological Network and that conservation of IPAs will support implementation of the Global Strategy for Plant Conservation under the Convention on Biological Diversity. The Environmentally Sensitive Areas (ESAs) identified for the purposes of the project along the route have the potential to act as a focus for IPA identification.
- **Large Mammal Action Planning** – the Turkey Large Mammals Project is focused on unsustainable hunting practices that significantly threaten populations of a number of target species and species groups. The project aims to develop

national strategies / action plans for the sustainability of above-mentioned sectors and the conservation of key species / species groups. Potential linkages exist with this project to develop and implement the outputs of the project to address large mammal issues in the regions traversed by the pipeline. Other opportunities exist to develop elements of this theme with other themes discussed above, such as forest management.

APPENDIX 2

RESULTS OF PRIORITY THEME SELECTION

Table A2.1: Azerbaijan Priority Theme Selection

	Score (0 – 3)						
Criteria	Public awareness / community involvement	Tougay forest conservation & management, Kura floodplain	Spur-thighed tortoise conservation management	Semi-desert pilot area conservation management	Lake Jandar management & environmental centre	Persian Gazelle conservation management	Community level sustainable forestry initiatives
Stakeholder Alignment							
<u>Consistency with national plans [1]</u>	2	3	2	2	1	2	3
<u>Consistency with regional plans/priorities [2]</u>	0	2	1	0	0	1	2
<u>Consistency with BP corporate policies [3]</u>	3	3	3	3	3	3	3
Alignment with local community needs	2	2	0	1	0	0	3
Project Aligned							
Consistent with identified key areas for the project (identified through stakeholder consultation & residual ESIA impacts)	0	3	3	3	3	2	0
In proximity to pipeline	3	2	3	3	3	2	1
Linkages							
Compatibility with other ongoing / approved projects (can be consistent but not competing)	1	3	2	0	0	1	1
Compatibility with CIP	3	2	0	1	0	0	2
Sustainability							
Financially sustainable if necessary (when BP funding ends)	0	0	0	0	0	0	0
Environmentally sustainable (when BP funded intervention ends)	1	3	3	3	2	3	2
Monitoring							

	Score (0 – 3)						
Criteria	Public awareness / community involvement	Tougay forest conservation & management, Kura floodplain	Spur-thighed tortoise conservation management	Semi-desert pilot area conservation management	Lake Jandar management & environmental centre	Persian Gazelle conservation management	Community level sustainable forestry initiatives
Tangible output (a measurable output, material product, tangible change as a result of the investment)	3	3	2	3	3	2	3
Opportunity for progress monitoring	1	2	2	2	2	2	2
Business Value							
<u>Provision of BP and partners business (including reputation) gain (lack of risk to BP and partners)[4]</u>	3	3	3	3	1	2	3
Technology Transfer							
Opportunity for wider application of methods/results/knowledge	3	2	1	2	1	1	0
Prospect to be used as the basis for further projects	2	2	2	2	1	1	1
Geographic Range							
Regional spread (of benefit to more than one country)	1	2	2	0	1	2	0
Additional resources							
Potential to leverage additional funding or other resources (to promote financial sustainability)	1	2	1	1	1	1	1
TOTAL	29	39	30	29	22	25	25

Scores between 0 and 3 were allocated to reflect compatibility with the criterion, a score of 3 showing a high degree of compatibility and 0 a low or no compatibility.

[1] The Status of Biodiversity in Azerbaijan. Country Study Report (1996); Azerbaijan National Environmental Action Programme. Draft 1 (1996)

[2] e.g. Conservation International ‘biodiversity hotspot’: ‘Caucasus and Northeast Anatolia Temperate Forests’ WWF Global 200 Ecoregion; WWF & IUCN Centres of Plant Diversity - the Caucasus (Armenia, Azerbaijan, Georgia and Russia); Birdlife International Caucasus Endemic Bird Area.

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- Conservation Projects create collaborative partnerships, fund and contribute to conservation activities aligned with local, national, regional and global priorities;
- Research, Education and Awareness make a positive contribution to biodiversity research and education; raise awareness and understanding of our employees, people we work with and our customers.

[4] Biodiversity responsibilities present BP with a number of potential business opportunities such as:

- Reputation opportunities:
 - building on BP reputation for environmental leadership;
 - enhancing our Brand image;
 - sustaining and improving relationships with local communities, governments, NGOs and academic institutions; and
 - building trust and support for us to operate in sensitive environments.
- Business efficiency opportunities:
 - gaining access to new areas
 - encouraging technology innovation;
 - encouraging greater resource recovery and efficiency;
 - promoting continuing efforts to reduce emissions and discharges; and
 - reducing future remediation and liabilities.
- Commercial/financial opportunities:
 - share-holder value increased
 - green investment attributes
- Political opportunities:
 - close advisory relations with governments
 - ability to re-form environmental regulations
 - ability to re-design environmental impact criteria

Table A2.2: Georgia Priority Theme Selection

	Score (0 – 3)								
Criteria	Public awareness / community involvement	Brown bear conservation management	Black Grouse habitat investigation, monitoring & conservation management	Ktsia-Tabatskuri Managed Reserve management planning	Sustainable forest management pilot project	Borjomi-Kharagauli National Park / Support Zone	Tougay forest conservation & management, Kura floodplain	Wetland bird programmes	Persian gazelle conservation management
Stakeholder Alignment									
<u>Consistency with national plans[1]</u>	3	1	1	3	3	3	1	1	1
<u>Consistency with regional plans/priorities[2]</u>	0	1	2	0	2	1	2	1	1
<u>Consistency with BP corporate policies[3]</u>	3	3	3	3	3	3	3	3	3
Alignment with local community needs	2	0	0	0	2	2	1	0	0
Project Aligned									
Consistent with identified key areas for the project (identified through stakeholder consultation & residual ESIA impacts)	0	3	3	3	3	2	0	2	0
In proximity to pipeline	3	3	3	3	3	3	0	3	0
Linkages									
Compatibility with other ongoing / approved projects (can be consistent but not competing)	0	1	0	2	3	3	3	0	0
Compatibility with CIP	3	0	0	0	2	0	1	0	0
Sustainability									
Financially sustainable if necessary (when BP funding ends)	0	0	0	0	1	1	0	0	0

	Score (0 – 3)								
Criteria	Public awareness / community involvement	Brown bear conservation management	Black Grouse habitat investigation, monitoring & conservation management	Ktsia-Tabatskuri Managed Reserve management planning	Sustainable forest management pilot project	Borjomi-Kharagauli National Park / Support Zone	Tougay forest conservation & management, Kura floodplain	Wetland bird programmes	Persian gazelle conservation management
Environmentally sustainable (when BP funded intervention ends)	1	2	2	3	3	2	3	2	2
Monitoring									
Tangible output (a measurable output, material product, tangible change as a result of the investment)	3	2	3	3	3	2	3	2	2
Opportunity for progress monitoring	1	2	2	2	2	1	2	2	2
Business Value									
<u>Provision of BP and partners business (including reputation) gain (lack of risk to BP and partners)[4]</u>	3	2	3	3	3	2	1	2	2
Technology Transfer									
Opportunity for wider application of methods/results/knowledge	3	2	2	2	2	1	2	1	1
Prospect to be used as the basis for further projects	2	2	2	1	2	1	2	2	1
Geographic Range									
Regional spread (of benefit to more than one country)	1	2	2	0	0	0	2	1	2
Additional resources									
Potential to leverage additional funding or other resources (to promote financial sustainability)	1	1	2	1	1	2	1	1	1
TOTAL	29	27	30	29	38	29	27	23	18

Scores between 0 and 3 were allocated to reflect compatibility with the criterion, a score of 3 showing a high degree of compatibility and 0 a low or no compatibility.

[1] Biodiversity Strategy and Action Plan. MoE (1999) & The Status of Biodiversity in Georgia. Country Study Report (1996); Georgia National Environmental Action Programme. Draft 1 (2000) & Measures Facilitating Establishment of Protected Areas System. (1995); Law of Georgia on the Protected Areas System (1996). Strategy for Development of the Forestry in Georgia (World Bank)

[2] e.g. Conservation International 'biodiversity hotspot': 'Caucasus and Northeast Anatolia Temperate Forests' WWF Global 200 Ecoregion; WWF & IUCN Centres of Plant Diversity - the Caucasus (Armenia, Azerbaijan, Georgia and Russia); Birdlife International Caucasus Endemic Bird Area.

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 - encouraging technology innovation;
 - encouraging greater resource recovery and efficiency;
 - promoting continuing efforts to reduce emissions and discharges; and
 - reducing future remediation and liabilities.
- Commercial/financial opportunities:
 - share-holder value increased
 - green investment attributes

- Political opportunities:
 - close advisory relations with governments
 - ability to re-form environmental regulations
 - ability to re-design environmental impact criteria

Table A2.3: Turkey Priority Theme Selection

	Score (0 – 3)										
Criteria	Public awareness / community involvement	Black Grouse habitat investigation , monitoring & conservation management	Potential IBA Programme	Potential IBOA Programme	Forest Habitat Enhancement	Lesser Caucasus, Forest Gap Analysis and Sub-ecoregion study, NE Anatolia	Monk Seal Research, Gulf of Iskenderum	Sea Turtles, Gulf of Iskenderum	Monitoring bird populations in Ceyhan Delta	Large Mammal Action Planning	Important Plant Areas Project
Stakeholder Alignment											
<u>Consistency with national plans[1]</u>	3	2	1	3	3	2	3	3	1	2	2
<u>Consistency with regional plans/priorities[2]</u>	0	2	3	3	3	3	3	3	1	2	2
<u>Consistency with BP corporate policies[3]</u>	3	3	3	3	3	3	3	3	3	3	3
Alignment with local community needs	2	0	0	0	2	1	0	0	0	1	0
Project Aligned											
Consistent with identified key areas for the project (identified through stakeholder consultation & residual ESIA impacts)	0	3	2	1	3	1	2	3	2	1	2
In proximity to pipeline	3	2	3	1	2	2	1	3	3	2	3
Linkages											
Compatibility with other ongoing / approved projects (can be consistent but not competing)	0	1	3	3	2	3	2	3	1	1	3
Potential Compatibility with CIP	3	0	0	0	2	1	0	0	0	1	0
Sustainability											

	Score (0 – 3)										
Criteria	Public awareness / community involvement	Black Grouse habitat investigation , monitoring & conservation management	Potential IBA Programme	Potential IBOA Programme	Forest Habitat Enhancement	Lesser Caucasus, Forest Gap Analysis and Sub-ecoregion study, NE Anatolia	Monk Seal Research, Gulf of Iskenderum	Sea Turtles, Gulf of Iskenderum	Monitoring bird populations in Ceyhan Delta	Large Mammal Action Planning	Important Plant Areas Project
Financially sustainable if necessary (when BP funding ends)	0	0	0	0	2	1	0	1	0	0	1
Environmentally sustainable (when BP funded intervention ends)	1	2	2	2	3	1	1	1	2	2	2
Monitoring											
Tangible output (a measurable output, material product, tangible change as a result of the investment)	3	3	3	2	3	3	2	3	2	2	3
Opportunity for progress monitoring	1	2	2	2	3	3	2	3	2	2	2
Business Value											
<u>Provision of BP and partners business (including reputation) gain (lack of risk to BP and partners)[4]</u>	3	2	3	2	2	2	2	3	1	2	2
Technology Transfer											
Opportunity for wider application of methods/results/knowledge	3	2	2	2	2	2	2	2	2	1	2
Prospect to be used as the basis for further projects	2	2	3	2	2	3	2	2	2	1	2
Geographic Range											
Regional spread (of benefit to more than one country)	1	2	1	0	2	1	2	2	0	1	1
Additional resources											
Potential to leverage additional funding	1	2	2	2	1	1	1	1	1	1	2

	Score (0 – 3)										
Criteria	Public awareness / community involvement	Black Grouse habitat investigation , monitoring & conservation management	Potential IBA Programme	Potential IBOA Programme	Forest Habitat Enhancement	Lesser Caucasus, Forest Gap Analysis and Sub-ecoregion study, NE Anatolia	Monk Seal Research, Gulf of Iskenderum	Sea Turtles, Gulf of Iskenderum	Monitoring bird populations in Ceyhan Delta	Large Mammal Action Planning	Important Plant Areas Project
or other resources (to promote financial sustainability)											
TOTAL	29	30	33	28	40	33	28	36	23	25	29

Scores between 0 and 3 were allocated to reflect compatibility with the criterion, a score of 3 showing a high degree of compatibility and 0 a low or no compatibility.

[1] The Biodiversity National Action Plans, Turkey: Strategic Action Plan For Biodiversity In The Mediterranean Sea

[2] e.g. WWF Global 200 Ecoregion and sub-ecoregions; Birdlife International Potential IBAs and RAMSARs.

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