

7. Lack of assessment of alternatives to the BTC project

Evaluation of Environmental Impact Assessment against World Bank standards

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7.1 Summary

Both the IFC and EBRD require that the EIA assess alternatives to the project, including the “without project” option.

This review finds:

- **At least 8 partial or total violations of IFC Operational Policy OP 4.01 (Environmental Assessment) on assessment of alternatives.**

Specifically:

- **The “Without project” option was not seriously considered, with many alternatives not considered at all, and those that were, only in an unbalanced way and with very limited scope;**
- **Alternative strategic routes were not seriously considered;**
- **There was a clear failure to properly consult on project alternatives;**
- **A systematic approach to assessment of alternatives was lacking.**

7.2 Introduction

The International Finance Corporation (IFC) states in Operational Policy OP 4.01 (Environmental Assessment) that for it to finance a project, IFC requires that the project:

*“systematically compares feasible alternatives to the proposed project site technology, design, and operation – including the ‘without project’ situation – in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs their suitability under local conditions; and their institutional, training and monitoring requirements”.*¹

OP 4.01 references the World Bank’s Environmental Assessment Sourcebook and its updates as providing more relevant information and guidance, which further explains these IFC requirements. One particular update to the sourcebook, published in December 1996, specifically focuses on the subject of analysis of alternatives.²

The World Bank emphasises the importance of this exercise:

*“A thorough, unbiased and transparent assessment of investment alternatives from an environmental and social perspective (as well as a technical and economic standpoint) is one of the most important contributions EA can make to improving decision-making. without disrupting project preparation in a manner that is so time-consuming and expensive as to be impractical.”*³

The Environmental Impact Assessment (EIA) for the Turkey section of the Baku-Tbilisi-Ceyhan pipeline (BTC) deals with project alternatives in its Chapter 2. This chapter examines the compliance of this treatment with IFC policy OP 4.01, and details as set out in the World Bank Environmental Assessment Sourcebook. It looks at the EIA’s assessment first of the ‘without project alternative’, then of alternatives at the strategic level (such as pipelines to alternative destinations). It goes on to examine consultation on alternatives by BTC Co., and finally assesses whether the EIA’s treatment of alternatives was *systematic*, as required by IFC – on this last point, it assesses the approach against recommendations in the World Bank Sourcebook.

It should be noted that this chapter should not be taken as *advocating* any of the particular project alternatives it refers to. Indeed it is not the role of this review to so. Where alternatives are considered, including their apparent benefits against BTC, this is merely to assess the extent to which the EIA considered options that were *prima facie* feasible or beneficial, or whether the EIA sought rather just to justify a pre-judged conclusion that BTC was the preferred option.

¹ International Finance Corporation, OP 4.01, Environmental Assessment, Annex B – ‘Content of an Environmental Assessment Report for a Category A Project’, clause f)

² World Bank, Environmental Assessment Sourcebook, Update no. 17, December 1996, ‘Analysis of alternatives in environmental assessment’

³ World Bank, Environmental Assessment Sourcebook, Update no. 17, December 1996, ‘Analysis of alternatives in environmental assessment’, p.1

7.3 IFC policy OP 4.01 Environmental Assessment

IFC policy OP 4.01 requires the assessment of project alternatives in an EIA. The details of how this should be achieved effectively, and on what is meant by the requirement, are set out in the World Bank's Environmental Assessment Sourcebook, and updates to it. These are considered below.

7.3.1 'Without project' situation inadequately considered

Relevant paragraph and key requirement	Specific obligations	Evaluation of compliance	Extent of compliance
OP 4.01, Annex B, clause f Compare with 'without project' situation	<i>"[requires that the project] systematically compares feasible alternatives to the proposed project site technology, design, and operation – including the 'without project' situation"</i>	1. Only considers 'without ACG oilfields' scenario, not 'with ACG, without BTC' 2. Considers only economic impacts of not developing ACG, not environmental or social, and considers only negative impacts of the no-development option, and no positive ones	Partial compliance
		3. Does not consider the alternative of not building BTC and instead refining in Azerbaijan	Non compliance

7.3.1.1 Only considers 'without ACG oilfields' scenario, not 'with ACG, without BTC'

The EIA states that BTC "is part of the wider development" of the ACG fields. It then asserts, without justification or analysis, that "If the BTC Project were not to be realised ... the development of the ACG oil fields in the Caspian Sea would not be viable".⁴

The option of refining the ACG oil in Azerbaijan, for both domestic use and export of the refined products, is nowhere considered – even as part of the solution to the question of how to use ACG oil (perhaps combined with some export). (See section 7.3.1.3, below).

⁴ BTC EIA, Turkey, October 2002, section 2.2.2 – 'The no-development option'

7.3.1.2 Considers only economic impacts of not developing ACG

The BTC EIA rejects immediately the scenario of not developing the ACG fields, due to negative economic impacts on Azerbaijan. There is no consideration of non-economic impacts (such as environmental or social), nor even *substantive* examination of economic impacts. Nor is there consideration of *how* or *when* it would be best for Azerbaijan to develop ACG. There might, for example, be political advantages to a later development, once institutional capacity is more developed, or economic advantages to a slower or more phased developed, to bring more sustained revenues.

Furthermore, there would be obvious environmental advantages to not developing ACG. The 5.3 billion barrels of oil extracted from ACG would, once burnt, contribute about 3 billion tonnes of carbon dioxide to the Earth's atmosphere.⁵ Meanwhile, the biggest political backer of the BTC pipeline, and one of its major beneficiaries, is the USA. It is expected that US carbon dioxide emissions will be 30 per cent above 1990 levels by 2012,⁶ instead of 7 per cent below as agreed in the Kyoto Protocol. US per capita emissions are twice those of the EU.⁷ Development of ACG and BTC would effectively be supporting the energy profligacy of the US while it remains outside the Kyoto Protocol. While the external costs and benefits of oil developments are many and complex, their very significant impact on climate change, the greatest environmental threat facing the planet, must at least be considered in relation to the economics benefits – something the EIA for BTC has failed to do. (See also section 6.4.7 of chapter 6, Environmental Assessment).

The question of alternatives is addressed only in slightly more detail in the ESIA for the ACG field development itself – although this is not referenced in the BTC EIA as helping justify the rejection of the no-development option.

In that document, it is stated that “The primary objective of Phase 1 of the ACG Full Field Development (FFD) project is to produce and deliver to the market the recoverable reserves in the central part of the Azeri Field”.⁸ This however is less an ‘objective’ than a proposed answer to achieve an objective, in the sense of the World Bank / IFC’s requirement that “Alternatives that will meet the objective should be identified with as much freedom from limiting conditions as possible”.⁹ A more open objective might have allowed a number of possible solutions; this as objective presupposes the solution.

⁵ The calculation of the potential carbon dioxide emissions from the Caspian oil and gas assumes the constituents of the fuel are completely burnt, that is, oxidised. Calculations were based on the total energy released, the carbon content per unit of energy, and the ratio of carbon to carbon dioxide released. For oil, the energy content of one tonne of crude petroleum was assumed to be 44.9 gigajoules (GJ), and the carbon released per GJ of energy was assumed to be 19.4 kilogrammes. For gas, the energy content of one cubic metre of natural gas was assumed to be 0.0391GJ, and the carbon released per GJ of energy was assumed to be 14.2 kilogrammes. The carbon to carbon dioxide ratio used was 12/44. See Greg Muttitt and James Marriott, *Some Common Concerns*, pub. PLATFORM et al, 2002, chapter 14

⁶ Natural Resources Defense Council, February 2002, ‘Untangling the Accounting Gimmicks in White House Global Warming, Pollution Plans’

⁷ Harri Lammi and Oras Tynkkynen, 2000, ‘The Whole Climate’, pub. Friends of the Earth Finland (Tampere), p.9. The data used is from the International Energy Agency’s 1999 edition of *Key World Energy Statistics* and is based on 1997 emissions from fuel combustion only.

⁸ Azeri, Chirag & Gunashli Full Field Development Phase 1 ESIA, February 2002, section 4.1 – ‘Options assessed – Introduction’

⁹ World Bank, *Environmental Assessment Sourcebook*, Update no. 17, December 1996, ‘Analysis of alternatives in environmental assessment’, p.3

The ACG EIA's consideration of the no-development option¹⁰ dwells almost exclusively on economic aspects: less than 10% of the text – a mere 46 words – considers non-economic impacts of development or non-development of the fields.

One of these non-economic issues seems spurious – “specific environmental benefits accruing from the project such as the opportunity to provide ‘cleaner’ fuels to the market (replacing ‘dirtier’ fuels, e.g., wood)”¹¹ – as it seems to suggest that the ACG oil is destined for the Azerbaijan market rather than export [Note that the alternative of refining within Azerbaijan would, in contrast, have delivered this objective]. The others all relate to “additionality” – ie voluntary add-on social investment which is not integral to the project.

Furthermore, the ACG EIA only lists negative impacts of the no-development option. A balanced and more objective assessment would consider both positive and negative aspects of the various alternatives; instead, this reads much more as a justification of a pre-judged conclusion.

In no way can the project be judged to have considered the ‘without project situation’ *systematically*, as would be required by the IFC.

The World Bank warns:

“Conducting a truly objective evaluation of the no-action alternative requires extra care, since various interest groups have historically used it to support positions for and against projects. Environmental groups that favor preservation over development have used it to highlight the negative impacts while downplaying project benefits. At the other extreme, advocates of development within the sector concerned tend to emphasize the economic benefits that will be foregone, using the no-action option as a vehicle for providing support for a project proposal.”¹²

BTC seems to have fallen into the latter trap.

7.3.1.3 Does not consider the alternative of not building BTC and instead refining in Azerbaijan

The option of refining the ACG oil in Azerbaijan, for both domestic use and export of the refined products, is nowhere considered. It is not the role of this submission to analyse such alternatives in depth, nor to advocate them; however, it is noted that there is at least a *prima facie* case that such a solution may have favourable economic, social and environmental impacts, compared to the BTC option.

Azerbaijan was the birthplace of the oil refining industry, and the centre of Soviet refining. Now, however, Azerbaijan's refining industry is operating at only 40% of its capacity, largely

¹⁰ Azeri, Chirag & Gunashli Full Field Development Phase 1 ESIA, February 2002, section 4.2 – ‘No-development option’

¹¹ Azeri, Chirag & Gunashli Full Field Development Phase 1 ESIA, February 2002, section 4.2 – ‘No-development option’

¹² World Bank, Environmental Assessment Sourcebook, Update no. 17, December 1996, ‘Analysis of alternatives in environmental assessment’, p.7

due to lack of crude supply.¹³ NGOs and opposition parties in Azerbaijan claim that by focussing entirely on export of crude, Azerbaijan is losing an opportunity to benefit from adding value to the products. Meanwhile, there is very poor availability of oil products in Azerbaijan, and there has been a skills exodus from the country as the refining sector has collapsed.¹⁴

As a result of limited crude deliveries to the refineries, Azerbaijan suffered a fuel crisis in the spring of 2000 and was forced to import crude from Iran in order to produce enough fuel oil to keep the country's thermal power plants working.¹⁵

Also as a result of the focus on export of crude, Azerbaijan has been forced to import both crude for its own refineries, and oil products from neighbouring countries. Use of Azeri crude in Azeri refineries would have an obvious environmental advantage over the reliance on trade, as it would involve less transport of oil and products, and hence less risk of leakage and spills, as well as less energy used in the transport itself.

Thus, directing ACG crude toward processing in Azerbaijan's refineries, would appear to, compared to export through BTC:

- provide more employment;
- provide more investment (in modernising the refineries);
- provide more government revenue and better balance of payments;
- build on Azerbaijan's strong capacity and skill base in refining;
- have less environmental risk, due to less reliance on transport;
- provide Azerbaijan's population with a more steady and reliable energy supply.

Given all these apparent advantages over crude export, it is odd that this alternative is considered nowhere in the EIA.

7.3.2 Alternative strategic routes not seriously considered

Relevant paragraph and key requirement	Specific obligations	Evaluation of compliance	Extent of compliance
OP 4.01, Annex B, clause f	<i>"[requires that the project] systematically</i>	1. Fails to consider possible export routes to ports in Iran, Pakistan or China	Non compliance

¹³ US Department of Energy, Energy Information Administration, Country Analysis Briefs – Azerbaijan, June 2003, www.eia.doe.gov/emeu/cabs/azerbjan.html

¹⁴ International Fact-Finding Mission, Preliminary Report, September 2002, Azerbaijan, Georgia, Turkey Pipelines project - Azerbaijan Section (Green Alternative, National Ecological Centre of Ukraine, CEE Bankwatch Network, Campagna per la riforma della Banca mondiale, Platform, Friends of the Earth US, Bank Information Center, Ilisu Dam Campaign, The Corner House, Kurdish Human Rights Project)

¹⁵ NewsBase, 20/6/00, 'FSU refineries: Azerbaijan's refineries', By Heiko Pleines

Compare with alternative feasible routes	<i>compares feasible alternatives to the proposed project site</i>	China	
		2. Rejects routes to Supsa (Georgia) or Novorossiysk (Russia), including combined with Bosphorus bypass, without giving justification	Partial compliance

7.3.2.1 Fails to consider possible export routes to ports in Iran, Pakistan or China

Throughout the 1990s, there was extensive political and economic debate about the best route to export Azerbaijan’s oil. Six alternatives were discussed¹⁶:

- 1) to Ceyhan in Turkey, via either Georgia, Armenia or Iran;
- 2) to the Iranian Persian Gulf port of Kharg Island via Iran, with the possibility of an oil swap in the initial phase to decrease costs;
- 3) to the Pakistani Indian Ocean port of Gwadar, via an undersea pipeline across the Caspian, then via Turkmenistan, Afghanistan and Pakistan;
- 4) to the Chinese market along the ‘Silk Road’ eastwards via a Caspian undersea pipeline, Turkmenistan, Uzbekistan and Tajikistan; and
- 5) substantially upgrading
 - a) the Baku-Supsa, and / or
 - b) the Baku-Novorossiysk

pipelines and port terminals to enable them to carry larger volumes of oil. If this option were pursued, there could be a secondary (‘Bosphorus bypass’) pipeline on the other side of the Black Sea, involving some of the Ukraine, Romania, Bulgaria, Greece, Serbia, Montenegro or Croatia.

The BTC EIA’s consideration of routes at the macro level begins by saying,

“A pipeline option would enable Caspian ACG crude volumes to be exported from the land-locked Caspian Sea, to open market, without an incremental increase in volumes shipped through the Turkish Straits. Turkey was selected as the most suitable export destination, as it is the nearest country to Azerbaijan with access to the Mediterranean Sea, which provides the nearest open market point of delivery.”¹⁷

Thus it immediately discounts, without serious consideration, the other options listed above.

¹⁶ See *Some Common Concerns*, by Greg Muttitt and James Marriott, pub October 2002 by PLATFORM et al, chapter 3

¹⁷ BTC EIA, Turkey, October 2002, section 2.2.4 – ‘Regional routing options’

The route south through Iran (option 2) is generally agreed to be the cheapest and most economically attractive route.¹⁸ Although there are obvious political difficulties¹⁹, the economic advantages should at least have justified serious consideration of this option. Furthermore, the World Bank Sourcebook is clear that alternatives assessment should consider all aspects of the various options, including environmental and social, as well as economic, political and technical feasibility.²⁰

That the Iran route was strongly argued for in the *Oil & Gas Journal*, which is published in the USA, suggests the political problems may not be as insurmountable as the BTC EIA suggests. Indeed, the Iranian national oil company is a partner in the Shah Deniz / South Caucasus Pipeline gas project, which is closely associated with BTC.

Furthermore, six of the 10 foreign investors participating in BTC have investments in Iran: BP²¹, Statoil²², Total²³, ENI²⁴, Itochu²⁵, Inpex²⁶. 54.7% of BTC Co is owned by companies with investments in Iran; a further 31.5% is owned by the two state oil companies of Azerbaijan and Turkey, neither of which have overseas investments at all, but both of which have other deals with Iran.²⁷ Just 13.8% of BTC Co is owned by US companies which do not invest in Iran,

¹⁸ MR Farzanegan, 'Iranian options most economically viable for exporting Caspian oil', *Oil & Gas Journal*, 17 March 2003

¹⁹ BTC does consider the political difficulties of routing through Iran, but only in the context of a transit country en route to Ceyhan, not as a route to the Persian Gulf ports

²⁰ World Bank, Environmental Assessment Sourcebook, Update no. 17, December 1996, 'Analysis of alternatives in environmental assessment', p.1

²¹ BP opened an office in Tehran in early 1998, identifying Iran as particularly important for refined product and petrochemical operations. BP is bidding for a stake in the major South Pars gasfield, and is a 25% shareholder in the consortium building an LNG plant to process the South Pars gas. It is also shortlisted as a possible operator of the Ahwaz oil field. [Energy24, 5/12/00, 'BP joins quest to secure interest in Iran field'; Ananova, 5/8/02, 'BP and Reliance complete feasibility study for LNG project in Iran'; Asia Times, 27/2/03, 'BP marches back into Iran'; AFP, 5/3/03, 'Iran seeks investment for South Pars gas field'; Europe Intelligence Wire, 16/3/03, 'BP and Total to manage Iranian oil field']

²² In 2000, Statoil entered four deals with Iran, concerning exploration rights in the Straits of Hormuz and the Iranian portion of the Oman Sea, the development of a gas-to-liquids technology program, the provision of aid in managing four crude-producing fields, and the possibility of being involved in the development of the Salman field. It is also the operator of phases 6, 7 and 8 of the South Pars gas field [WorldNews.com, 23/11/00, 'NIOC and Statoil to explore and develop Iran's Gulf waters'; the Norway Post, 29/10/02]

²³ Total was the first was the first Western oil company to begin operations in Iran in the 1990s, when it signed a contract to develop Sirri A and E offshore fields in 1995, and now the country is a key strategic priority for the company. In 1997, it joined a consortium with Petronas of Malaysia and Russia's Gazprom to handle the second and third phase development of South Pars gas field, worth \$ 2 bn. Shares in Dorood and Balal oil fields were also acquired in 1999 when taking over Elf. [IRNA, 15/11/00, 'TotalFinaElf seeks to help Iran develop its hydrocarbon reserves']

²⁴ ENI is the operator (with a 60% stake) of phases 4 and 5 (the largest foreign investment to date in Iran) of the South Pars gas field. It has a 38% stake in the Balal field, is operator of the Darkhuwain and Darquain oil fields, and is carrying out a feasibility for a major gas pipeline from Iran to India, through Pakistan [IRNA, 24/11/00, 'Iran to develop seven phases of South Pars gas field'; IRNA, 12/2/01, 'ENI extends cooperation with TotalFinaElf for Iran's Balal field'; Dow Jones, 26/4/01, 'ENI works on feasibility study for Iran-Pakistan-India gas pipeline'; Xinhua, 13/7/01, 'Iran delighted about energy deals despite Iran-Libya Sanctions Act'; OGI, 8/11/02, 'ENI achieves record flow rates at Iran's Darquain well']

²⁵ The trading house arm of Itochu in 2001 co-signed an investment / trade deal involving advance payment for oil exports from Iran to Japan. A Japanese government official referred to the deal as "a de facto promotion measure" aimed at winning the right to develop and operate the Azadegan oil field in Iran, one of the largest in the world [Daily Yomiuri On-Line, 13/3/01, 'Japan-Iran finance deal is part of a multisector agreement']

²⁶ Inpex leads a consortium developing the major Azadegan oil field. It has a 5% stake in the Soroosh/Nowrooz oil field, and also participates in the South Pars gas project [The Yomiuri Shimbun, 20/9/02, 'Japan makes deal with Iran and Qatar on natural gas fields'; Middle East Economic Digest, 21/1/03, 'Japanese consortium takes stake in Iranian oil development'; AFP, 5/3/03, 'Iran seeks investment for South Pars gas field']

²⁷ Turkey receives natural gas from Iran. Azerbaijan granted the National Iranian Oil Company a stake in the Shah Deniz gas field

although US companies have been lobbying hard for the US government to change its policy, ConocoPhillips being one of the most vociferous.²⁸

The Pakistan and China alternatives are not considered either by the BTC EIA.

7.3.2.2 Rejects routes to Supsa (Georgia) or Novorossiysk (Russia), including combined with Bosphorus bypass, without giving justification

The EIA does return to the Baku-Supsa and Baku-Novorossiysk options, considering each either with or without a bypass of the Bosphorus. However, having listed the five options, it states baldly,

“The study concluded that Baku-Tbilisi-Ceyhan route represented the lowest environmental risk option”²⁹

No information is given as to the methodology used to reach this conclusion, nor the issues examined.

The EIA refers to study of these five options in an Environmental Risk Assessment. However, BP has refused to disclose this study³⁰, so it is impossible to assess how they were considered, or their various benefits and impacts. However, at the very least, BP is thus in direct breach of the requirements specified in the World Bank Sourcebook, that:

“In all cases, the basis for selection of the preferred alternative(s) should be transparent and clearly described”³¹

The two options involving a Bosphorus bypass would seem to deserve careful consideration, as:

- be cheaper than BTC³²;
- have environmental advantages of avoiding the Borjomi National Park in Georgia, the extensive biodiversity of Turkey, and the risks due to severe fault lines crossed in Turkey – meanwhile, like BTC they would also avoid the environmental risks of the Bosphorus;
- have social advantages over BTC of avoiding the Kurdish areas of northeast Turkey, where there are major human rights issues, and necessary social difficulties associated with consultation and compensation³³;

²⁸ Alexander’s Gas and Oil Connections, 11/2/97, ‘President Conoco at CERA urges US Government to reconsider sanctions’; Business Wire, 2/10/99, ‘Recent discovery in Iran offers US opportunity to revisit its policy of unilateral sanctions’; AFP, 19/9/00, ‘Coalition asks Clinton administration to end sanctions against Iran’

²⁹ BTC EIA, Turkey, October 2002, section 2.2.4 – ‘Regional routing options’

³⁰ email correspondence between Nicholas Hildyard (the Corner House) and Barry Halton (Regional Affairs Director, BTC), July 2003

³¹ World Bank, Environmental Assessment Sourcebook, Update no. 17, December 1996, ‘Analysis of alternatives in environmental assessment’, p.6

³² Ronald Soligo and Amy Jaffe, ‘The Economics of Pipeline Routes: The Conundrum of Oil Exports from the Caspian Basin’, April 1998, published in *Energy in the Caspian Region, Present and Future*, ed. Yelena Kalyuzhnova, Amy Myers Jaffe, Dov Lynch, Robin C. Sickles, pub Palgrave Macmillan, March 2002

³³ International Fact-Finding Mission: Baku-Tbilisi-Ceyhan Pipeline—Turkey Section, March 2003 (report pub.June 2003)

- have security advantages over BTC, by avoiding the risk of sabotage by KADEK (formerly PKK – the Kurdistan Workers’ Party) in Turkey.³⁴

The BTC EIA mentions a contingency study into options to export just Phase 1 of ACG oil. Oddly, it only considers options which involve shipping through the Bosphorus, and so rejects these immediately. It does not explain why only these options passed the screening process. It does not consider Bosphorus bypasses here. Nor does it consider a smaller capacity for BTC, for example only to export Phase 1 oil.

7.3.3 Failure to properly consult on project alternatives

Relevant paragraph and key requirement	Specific obligations	Evaluation of compliance	Extent of compliance
<p>OP 4.01, clause 12</p> <p>Consultation</p>	<p><i>“For all Category A projects ... during the EA process, the project sponsor consults project-affected groups and local nongovernmental organizations (NGOs) about the project’s environmental aspects and takes their views into account. The project sponsor initiates such consultations as early as possible”</i></p>	<p>1. Local community groups not involved in assessment of alternatives; NGOs and government agencies only involved when both the nature of the project and the ‘corridor of interest’ were already decided.</p>	<p>Partial compliance</p>

³⁴ During the height of their armed conflict with Turkish security forces in the 1990s, the PKK identified Turkish pipelines and oil refineries in the Kurdish regions as legitimate military targets. In July 1991, PKK guerrillas raided Turkish Petroleum’s (TPAO) research camp in Kurtalan and blew up 15 vehicles. Five months later in December 1991, the PKK destroyed TPAO’s Selmo oil wells near Batman with rocket fires. Then, in less than five weeks between 31 August and 5 October 1992, the PKK attacked three different pipeline sites in the Kurdish regions. First, on 31 August, Shell Oil’s depots near the Kurdish stronghold of Diyarbakir, were attacked and oil tanks were once again set on fire. Less than two weeks later, on 12 September, the PKK raided the Selmo oilfields a second time, setting fires and killing three engineers. Then, at the beginning of October, the TPAO pumping stations and factories near Sason were attacked and set on fire. In one of its most serious pipeline attacks on 10 July 1996, the PKK set fire to part of the Kirkuk-Yumurtalik pipeline (Turkey-Iraq) in Silopi, Iraq. These fires could not be controlled for days. Six months later, in January 1997, the PKK attacked Kirkuk-Yumurtalik again, this time in the town of Mardin in south-eastern Turkey.

In July 2003, KADEK leader Abdullah Ocalan (currently imprisoned in Turkey) issued a statement that he gave KADEK’s unilateral ceasefire two months, after which without concessions by the Turkish government, hostilities may resume [The Kurdish Observer - "Ocalan: My historical mission for peace ceases", MHA / July 6, 2003]

7.3.3.1 Local community groups not involved in assessment of alternatives; NGOs and government agencies only involved when both the nature of the project and the ‘corridor of interest’ were already decided

The World Bank Sourcebook stresses the importance of involving stakeholders in the evaluation of project alternatives:

*“[It] sends a message to affected communities and other interest groups that decisions still remain open in the areas usually of most concern to them—location, size and technology—in contrast to cases in which the nature of the project and its location have already been decided”.*³⁵

Specifically, the Sourcebook recommends that projects include consultation in each of the following stages:

- *development of analytical methodology and TORs;*
- *selection of alternatives to be analyzed;*
- *determination of weights or importance values for evaluation parameters;*
- *comparison of alternatives; and*
- *formulation of recommendations.*³⁶

The Sourcebook identifies key stakeholders to be consulted as:

- *relevant government institutions,*
- *agencies,*
- *non-governmental organizations (NGOs),*
- *local community groups*³⁷

However, the EIA only mentions only two late stages of alternatives evaluation at which consultation took place:

(a) consultation with government authorities (Ministries, General Directorates and Governorships), at the stage of reviewing the ‘Corridor of Interest’³⁸, and

(b) meetings with government agencies and local NGOs, to identify possible impacts, at the stage of Environmental Baseline Study, during Basic Engineering.³⁹

Thus there was no opportunity for consultees to influence the important areas of “*location, size and technology*”, as required by the World Bank Sourcebook.

³⁵ World Bank, Environmental Assessment Sourcebook, Update no. 17, December 1996, ‘Analysis of alternatives in environmental assessment’, p.3

³⁶ World Bank, Environmental Assessment Sourcebook, Update no. 17, December 1996, ‘Analysis of alternatives in environmental assessment’, p.8

³⁷ World Bank, Environmental Assessment Sourcebook, Update no. 17, December 1996, ‘Analysis of alternatives in environmental assessment’, pp.4 and 6

³⁸ BTC EIA, Turkey, October 2002, section 2.3.5.1 – ‘Review of the corridor of interest’

³⁹ BTC EIA, Turkey, October 2002, box 2.1 – ‘Summary of BE Phase Environmental baseline studies’

There is no record of any consultation on project alternatives with affected community groups. More detail is given in the Bank Sourcebook on how consultation should take place:

“During evaluation, the process of public consultation should be continued to ensure that decision makers and stakeholders (including those at the individual sites) have confidence in the process.... Consultation should entail clearly presenting alternatives to all parties, in the local language(s), in a forum that encourages discussion”.⁴⁰

Evidence from International Fact-Finding Missions to Turkey shows that BTC is in breach of this guideline. The general attitude of people along the route in Turkey was that they had no ability to influence how the project takes place.⁴¹ Furthermore, Kurdish people in the northeast of Turkey reported that consultations mostly did not include Kurdish language presentations or translation, and that a large proportion of the population does not speak Turkish.⁴²

7.3.4 Lack of systematic approach to alternatives

Relevant paragraph and key requirement	Specific obligations	Evaluation of compliance	Extent of compliance
OP 4.01, Annex B, clause f Systematically consider alternatives	<i>“[requires that the project] systematically compares feasible alternatives to the proposed project”</i>	1. Alternatives not considered at early enough stage 2. Failure to consider key impacts or compare systematically. Of 50 recommendations ⁴³ in the World Bank Sourcebook, only 1 was fully carried out.	Partial compliance

7.3.4.1 Alternatives not considered at early enough stage

The World Bank Sourcebook states that

“Alternatives analysis in EA is designed to bring environmental and social considerations into the “upstream” stages of development planning—project identification and earlier—as well as the later stages of site selection, design and implementation. In the absence of such consideration, those steps in the project cycle are taken solely on the basis of technical feasibility, economics, and political preferences, and the EA for such a project tends to be

⁴⁰ World Bank, Environmental Assessment Sourcebook, Update no. 17, December 1996, ‘Analysis of alternatives in environmental assessment’, p.6

⁴¹ International Fact-Finding Mission Preliminary Report, Baku-Tbilisi-Ceyhan Pipeline Project, Turkey Section, August 2002

⁴² International Fact-Finding Mission: Baku-Tbilisi-Ceyhan Pipeline—Turkey Section, March 2003 (report pub.June 2003)

⁴³ 10 recommendations are listed, each for 5 stages of project development, making a total of 50 – see table below

directed to supporting or affirming a project proposal. At best, EA becomes a damage limitation exercise, with the benefits restricted to identification of mitigation measures.”⁴⁴

The EIA was carried out between 2000 and 2002. BP’s earliest consideration of routing issues was a desktop study on environmental issues in 1997, and a subsequent (undated) environmental risk assessment.⁴⁵ While BP has declined to make either of these documents available⁴⁶, so it is impossible to assess whether they comply with World Bank or other standards, we can note that they both come later than most of the routing and feasibility studies.

As early as November 1992, Socar, Botas, BP, Pennzoil and Amoco signed an agreement to finance studies of three pipeline options from Baku: to Supsa, to Novorossiysk and to Ceyhan. The Ceyhan route could pass through either Iran or Georgia. A protocol was signed between Azerbaijan and Turkey in March 1993 to develop the Ceyhan route, which agreed to examine both 500,000 and 800,000 barrels per day capacity.⁴⁷ Much of the detail of the routing was decided by 1995 (for example, the decision to route through the Borjomi National Park, rather than along a route previously suggested by the World Bank.⁴⁸

The requirement for early consideration of alternatives is re-emphasised by the World Bank Sourcebook:

“It is essential to integrate the identification of alternatives into the project identification process (prior to production of concept paper) to ensure a comprehensive analysis of alternatives... This is usually the pre-feasibility stage of a project, which may involve reconnaissance visits and preliminary investigations.”⁴⁹

Thus the project is in breach of World Bank guidelines on evaluating alternatives at an early stage of the project.

7.4.2 Failure to consider key impacts or compare systematically

It is not only on timing, but also on approach, that the project is in breach. International Finance Corporation requirements in Operation Policy OP 4.01 state clearly that necessary content of an EIA includes that it “**systematically** compares feasible alternatives” (emphasis added). The way to approach the comparison systematically is explained in an update to the World Bank’s Environmental Assessment Sourcebook.

The table below summarises whether each of five phases of project design carried out the actions listed by the World Bank as necessary to an effective evaluation of alternatives. The five phases examined here are:

⁴⁴ World Bank, Environmental Assessment Sourcebook, Update no. 17, December 1996, ‘Analysis of alternatives in environmental assessment’, p.1

⁴⁵ BTC EIA, Turkey, October 2002, section 2.2.4, ‘Regional routing options’

⁴⁶ email correspondence between Nicholas Hildyard (the Corner House) and Barry Halton (Regional Affairs Director, BTC), July 2003

⁴⁷ Petroleum Economist, June ’93, ‘Financing world energy - finding investors for the indispensable link

⁴⁸ pers comm, Greg Muttitt (PLATFORM), with Gill Cousins (Environmental and Social Manager, BTC), 18/7/03

⁴⁹ World Bank, Environmental Assessment Sourcebook, Update no. 17, December 1996, ‘Analysis of alternatives in environmental assessment’, p.4

- Strategic alternatives – including the without-project option, Azerbaijan refining and alternative pipeline routes to different terminal destinations (see section 7.3.2, above);
- Routing – including both major routing from Horasan to Ceyhan (NR1T, ALT1, SR1T, ALT2) and intermediate routing options from Posof to Horasan;
- Basic and detailed engineering – these two phases considered together;
- Above-ground installations – including pump stations, pressure reduction stations and block valve stations;
- Marine terminal – all aspects of the terminal.

For each of these, 10 recommendations made in the Sourcebook are evaluated in the table. **Of 50 recommendations⁵⁰ in the World Bank Sourcebook, only 1 was fully carried out, 15 partially and inadequately carried out, and 28 neglected completely** (6 were unknown or not applicable).

Most of the studies⁵¹ used to compile routing decisions are not even referenced in the EIA; nor are the consultants named. It is thus impossible to get more detail on any of the considerations. This is especially problematic, as mostly claims are unsubstantiated, or unclear. For example, specific environmental and social concerns are not outlined during the route selection, nor are alternative routings described. The majority of changes to the route are not described. Furthermore, it constitutes a breach of guidance in the World Bank Sourcebook, which states that:

*"Detailed or uninterpreted data are not appropriate for the main text and **should be presented in appendices or a separate volume**"⁵² (emphasis added)*

Important wildlife sites, such as the Posof Wildlife Protection Area (designed to protect the globally threatened Caucasian Black Grouse) and the Alacorak / Ulas Lakes (a potential Ramsar site, important for globally near-threatened bird species), alternative routing was only considered in the Basic Engineering phase, leaving limited options for re-routing. Even so, these options were not seriously considered, but rejected in a single sentence, with no substantiation. But for impacts as significant as these, they should have been incorporated into the intermediate-level routing decisions on the corridor of interest, which they were not. This is in violation of IFC requirements that

"For each of the alternatives, [the assessment] quantifies the environmental impacts to the extent possible"⁵³

These are the *only* significant impacts even mentioned in the consideration of alternative routing.

⁵⁰ 10 recommendations are listed, each for 5 stages of project development, making a total of 50 – see table below

⁵¹ eg pre-work programme of routing investigations (p.2-10); Basic Engineering Environmental Baseline Studies (p.2-14); end of Basic Engineering geohazards review (p. 2-16), route change file (p.2-24)

⁵² World Bank, Environmental Assessment Sourcebook, chapter 1, annex 1-3, clause 16

⁵³ International Finance Corporation, OP 4.01, Environmental Assessment, Annex B – 'Content of an Environmental Assessment Report for a Category A Project', clause f)

The routing parallel to the East Anatolian Natural Gas Pipeline (NGP) considers only advantages, not disadvantages.⁵⁴ For example:

- The risk of rupture of NGP due to BTC construction activities is not considered.
- The compound and cumulative risks of a major accident is not considered (a leak in NGP could lead to spontaneous ignition of the pressurised gas, which could then damage BTC and ignite its crude oil).

Options for siting Above-Ground Installations are not discussed, let alone their impacts and advantages and disadvantages.

Even in the few cases in the EIA where alternatives are considered, either an incomplete set of impacts is examined (most often technical or economic, not environmental or social - eg the wildlife sites), or only the advantages of BTC's preferred option are stated, and never the more complex pros and cons (eg the Marine Terminal⁵⁵). In this latter case, it is very unlikely that one option would be better on all counts – it seems as if BTC has only added these considerations at a later stage, to justify a decision it had already made, rather than genuinely incorporating them into the decision-making process.

That BTC Co.'s consideration of alternatives is almost entirely cursory rather than systematic suggests that it may have been added on as a procedural requirement rather than applied genuinely to the project thinking.

The table below shows that BTC has not complied with the World Bank's recommendations on how to carry out a systematic evaluation of alternatives. The considerations above and below show clearly that BTC cannot be claimed to have complied with the IFC's / World Bank's requirements that alternatives be evaluated

“in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs their suitability under local conditions; and their institutional, training and monitoring requirements”,

nor that the assessment

“states the basis for selecting the particular project design proposed”.⁵⁶

⁵⁴ BTC EIA, Turkey, October 2002, section 2.3.9 – ‘Parallel routing with the East Anatolian Natural Gas Pipeline’

⁵⁵ In considering the site, 6 advantages and no disadvantages are claimed for site 1, while each of the other suggested sites has between 2 and 4 further disadvantages listed [BTC EIA, Turkey, October 2002, section 2.4.1.1 – ‘Alternative sites considered’]. In considering whether to build a jetty or a single-point mooring, the jetty has 11 advantages and no disadvantages listed [BTC EIA, Turkey, October 2002, section 2.4.2.1 – ‘Choice of loading concept’].

⁵⁶ International Finance Corporation, OP 4.01, Environmental Assessment, Annex B – ‘Content of an Environmental Assessment Report for a Category A Project’, clause f)

Stage of assessment	World Bank requirements ⁵⁷	Done by BTC project?				
		Strategic alternatives ⁵⁸	Routing ⁵⁹	Basic / Detailed Engineering ⁶⁰	Above-Ground Installations ⁶¹	Marine Terminal ⁶²
Project objective	<i>“The starting point is the overall project objective”</i>	Inadequately – objective was set in closed, self-justifying manner	N/A	N/A	N/A	N/A
Initial list of options ⁶³	<i>“Alternatives that will meet the objective should be identified with as much freedom from limiting conditions as possible, consistent with maintaining reasonableness and practicality.”</i>	Inadequately – v. limited range of alternatives considered	Inadequately – lists given but avoidance of important wildlife sites not considered. ⁶⁴	No	Unknown – list not given in EIA	Yes

⁵⁷ World Bank, Environmental Assessment Sourcebook, Update no. 17, December 1996, ‘Analysis of alternatives in environmental assessment’, pp.3-8

⁵⁸ BTC EIA, Turkey, October 2002, section 2.2 – ‘Strategic alternatives’

⁵⁹ BTC EIA, Turkey, October 2002, sections 2.3.3 – ‘The feasibility study’ and 2.3.4 – ‘Intermediate routing studies’

⁶⁰ BTC EIA, Turkey, October 2002, sections 2.3.5 – ‘The Basic Engineering phase’ and 2.3.6 – ‘Detailed Engineering phase’

⁶¹ BTC EIA, Turkey, October 2002, section 2.3.10 – ‘Above ground installations’

⁶² BTC EIA, Turkey, October 2002, section 2.4 – ‘Options for the Marine Terminal’

⁶³ Initial list – consult – resource requirements – screening should be applied both to choice of technology and choice of location: we consider both together here

⁶⁴ On the Posof Wildlife Protection Area (designed to protect the globally threatened Caucasian Black Grouse), the EIA states: *“The point of entry is fixed... the area cannot be avoided”*. This statement is not justified. On the Sarikamis Forest (a designated Natural Site for its important Scot’s Pine communities), a route further west is rejected for constructability and geohazard reasons (no details given). On the Alacorak / Ulas Lakes (a potential Ramsar site), alternative routes are rejected due to the presence of karst. All three of these cases were considered only in the Basic Engineering phase, not in the selection of the corridor of interest. If addressed earlier, they would have avoided such a constrained look at alternative routing. In all three cases, the detailed advantages and disadvantages of the nearby alternative routes are not considered. Other wildlife sites are not considered at all.

			Alternative routes for envt + social reasons not given - subsequent changes to corridor of interest only for non-environmental reasons. ⁶⁵			
Consult on completeness of list	<i>“Consult with key stakeholders, including relevant government institutions, agencies and non-governmental organizations (NGOs), on whether the range of technologies being considered is complete.”</i>	No	No	No	No	No
Determine resource requirements of alternatives	<i>“resource requirements should be determined for each alternative. This includes energy types and quantities, water, land areas, associated infrastructure, staffing, raw materials/fuel, solid waste and effluent disposal and other requirements plus associated costs.”</i>	No	No	No	No	Inadequately – only considers energy use and land areas

⁶⁵ 3 cases mentioned, 1 moved for national security reasons, one for constructability and accessibility, and one for geo-technical reasons

Screening	<i>“Screening should be based on factors such as ability of the technology to meet the project objectives, availability of resource requirements (at a macro level), suitability in a particular situation, and the broad environmental and economic acceptability”</i>	No justific'n given, so not clear – suspect only economic, technical and political factors	No justific'n given, so not clear – suspect only economic and technical factors	No	Unknown – list not given in EIA	No
Examine impacts of alternatives	<i>“Environmental, social and health impacts of the shortlisted alternatives should be determined in sufficient detail to facilitate their comparative assessment.”</i>	Impacts not considered at all for some alternatives. ⁶⁶ Limited range of impacts considered for others ⁶⁷	Posof-Horasan: No. Horasan-Ceyhan: Inadequately ⁶⁸	Inadequately – most cases not considered; at best, very vague and incomplete information in some cases	Inadequately – some types of impacts mentioned, but sites not identified and no detail given	Inadequately – only gives advantages of site + jetty, not disadvantages
Ongoing consultation	<i>“During evaluation, the process of public consultation should be continued to ensure that decision makers and stakeholders (including those at the individual sites) have confidence in the process.”</i>	No	No – only with govt authorities	Inadequately – consultation only for the purpose of identifying impacts, not public participation	No	No

⁶⁶ eg Azerbaijan refining, Bosphorus bypass

⁶⁷ eg Black Sea / Bosphorus export

⁶⁸ EIA claims list of environmental features plotted on GIS, but no info given on this. Choice of route made primarily on technical issues; only secondarily on environmental constraints. Social and health impacts not considered at all.

				in the assessment process		
Comparative matrix	<i>“In every case, a table or matrix should be prepared summarizing qualitative or quantitative information for each option with decision criteria (economic, technical, environmental and social) on one axis and options on the other.”</i>	No	Claims a comparative scoring model used – but no details given, not even the scores for the options	No	No	Inadequately – sites matrix does not consider all impacts. Jetty vs SPM gives list of advantages, not a matrix
Transparent selection	<i>“In all cases, the basis for selection of the preferred alternative(s) should be transparent and clearly described.”</i>	No (see <u>section 7.3.2, above</u>)	No – no reasons given ⁶⁹	No – very little information given	No (options not even listed)	Inadequately – only gives advantages of site + jetty
Balance	<i>“Conduct an analysis of alternatives that is perceived as transparent, balanced, and responsive to stakeholder views.”</i>	No	No	No	No	No

⁶⁹ eg on Intermediate routing, the EIA states *“The route investigation was undertaken in July 2000 and the results of the investigation led to the selection of alternative III as the new ‘Corridor of Interest’”*. No further information at all is given as to why this option was chosen [BTC EIA, Turkey, October 2002, section 2.3.4 – ‘Intermediate routing studies’]