

Attachment

Preliminary OVOS of the Kok-Zhailau Mountain Ski Resort Project

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#### 4.1 ALTERNATIVES EXAMINED

##### 4.1.1 The option of rejecting the development (project rationale)

Development of a mountain ski resort is proposed as one of the quickest ways to diversify the economy of Kazakhstan and reduce the country's dependence on raw materials. At present, the high-tech branches of Kazakhstan's economy do not have sufficient intellectual resources to compete successfully with other countries. Creating an intellectual base will require more time and greater financial investment. As far as the service sector is concerned, Kazakhstan still does not have the cultural base, the experience or the potential for further improvement in service standards.

The fact that the country has a relatively small population means that large-scale development of the service sector requires orientation towards international tourism. However, on the one hand, Kazakhstan has no facilities to attract foreign tourists (to the Caspian Sea, for instance) and, on the other hand, its natural sites will not be able to withstand the environmental pressures generated by the scale of mass tourism necessary to fully develop the sector (Lake Borovoe, for example).

In contrast, Almaty's ski resorts are attractive because of their guaranteed good snow and the proximity of a large city with a unique, attractive culture and atmosphere, as well as a developed infrastructure which is currently experiencing too little demand to justify further development.

Rejecting the development of a mountain ski resort could mean that not only business from tourism but also various elements of the city's infrastructure come to a standstill and – in the absence of returns on costs – go into decline. Developing Almaty merely as Kazakhstan's financial capital will not produce the flow of visitors needed. The drawbacks of other projects for the mountain region, on which the resources earmarked for Kok Zhailau could be spent, are described below.

The construction of a 78-kilometre aerial cableway as part of the 'Lake Transit' project offers the possibility of transporting up to 1 million tourists a year from Almaty to Lake Issyk-Kul and back. In order to ensure full use of the cableway in winter, the creation of two ski resorts is proposed – one to the south of the Great Almaty Lake and the other on the north slope of the Kungey Alatau range. Although there are benefits from a social point of view – the project will reduce the journey to the Lake from 8 hours to 1 hour (at a speed of 7.5 m/s) – siting ski resorts in environmentally sensitive protected areas may cause significant harm to flora and fauna. Construction of the longest cableway in the world at a height of up to 4,000 m will also have significant environmental impact and be technically difficult. The fact that 2/3 of the route is in Kyrgyzstan could hamper approval of the project and use of the cableway, unless the necessary intergovernmental agreements can be reached. According to economists, the main limitation of the project will be the issue of return on costs, since, according to preliminary estimates, the projected return on costs over 5 years will require a guaranteed passenger flow of between 3,000 and 30,000 people per hour over the whole period.

The alternative of focusing on the existing resorts of Tabagan, Butakovka and Shymbulak, connecting them with Almaty and each other by means of an aerial cableway, is the most acceptable from an environmental point of view. But this link will require the construction of 10 km of aerial cableway from Kok Tobe to Tabagan, 6 km to Mount Pioneer and 6 km from there to Shymbulak, as well as a 3-km lift from Mount Pioneer to Butakovka: overall, this is 2 km more than the total length of the lifts at Kok Zhailau – which will also be significantly cheaper because of the shorter distance. But, whereas construction of lifts at Kok Zhailau will offer the opportunity for skiing over 65 km of pistes, the expansion of ski runs at the three other resorts will be insignificant, and consequently it will be difficult to achieve a return on the costs of investing there.

Although the design for construction of a 600 x 60 m sports complex in Tabagan – with a 350-bed hotel, an ice rink and an all-year-round upper ski slope with a 26% gradient – will have considerably less environmental impact, it will not provide societal benefits commensurate with the high level of investment.

Development of a ski resort at Kaskelen and Turgen is a more viable alternative, since the slopes in these areas have great potential. However, there is a high risk of mudflow hazard in the Kaskelen River Valley, which potentially complicates the project with specialized issues and makes development of basic facilities in the area more expensive. In addition, the potential location for the resort will be very inconvenient from the point of view of access and proximity to the city and the airport. Snow cover data indicate that the Kaskelen water basin does not have sufficient depth of natural snow cover for commercial exploitation for leisure skiing without the installation of an extensive system for the production of artificial snow. In order to create a ski centre in the Kaskelen area, it would be necessary to use a system for the production of artificial snow to provide 100% cover to the ski runs. From an environmental point of view, human impact on Kaskelen and Turgen has been kept to a minimum, maintaining more diverse, abundant and unspoiled flora and fauna.