

**The Competitiveness Initiative (TCI)
Transport Availability Improvement
(Task 18)
Trip Report**

Background

The assignment has been guided by terms of reference dated February 5, 2001, whose principal focus is on (1) increasing the availability of air transportation internationally and domestically for Mongolia's tourist industry and (2) surface and air transportation options for the export of meat to new overseas markets to be developed by Mongolian meat exporters. These terms of reference also ask for specific information on sources and contacts for charter aircraft, reefer containers, and small- to mid-sized freighter aircraft, as well as illustrative data on average transport prices in Asia for various modes and distances.

Level of Effort

The total level of effort for this assignment was 24 workdays. The field portion of the assignment took place in Mongolia between May 1 and May 20, 2001 (14 workdays). This work was preceded by a period of home office preparation of about 4.3 workdays to gather data, and investigate sources of charter aircraft and containers. Travel time has accounted for another 4 workdays. Home office technical and administrative wrap-up of the assignment required the balance of time inputs (about 1.7 workdays). The analysis of additional data on air cargo and reefer container transportation costs, whose submission to TCI is anticipated shortly, will be performed as an indirect labor cost.

Summary of Results

Exhibit 1 attached summarizes findings and recommendations. More detail on these findings and recommendations is presented below.

Issue I: Air Transport Seat Availability and Charter Aircraft for Tourism

Findings. First, most significantly, as the national airline, MIAT dominates the civil aviation sector of Mongolia. MIAT's non-commercial heritage and poor financial performance in the non-economic domestic market are the principal reasons that tour operators encounter problems and that Government officials resist liberalization of air chartering procedures and air taxi operations. Accordingly, the privatization of MIAT -- and the policy guidelines for the development of scheduled and non-scheduled air services in Mongolia that will accompany privatization -- constitute the single most important condition for improving international and domestic air services for the benefit of tourism. Before privatization, only modest procedural or operating upgrades in air services that affect the tourism industry are likely to be forthcoming.

Second, it appears that seat availability for international passengers to Mongolia is not presently a major constraint on the tourism industry.¹ This conclusion is based on informal telephone interviews with six overseas tour operators and a discussion with four local tour

¹ It is interesting to note that on two key MIAT international routes -- Seoul (ULB-SEL) and Osaka (ULB-OSA) -- competing airlines (JAL, ANA, Korean) are in fact technically charters, providing "non-scheduled" service that operates only in summer and then apparently on an irregular basis. MIAT reportedly has a pool arrangement with Korean for the two carriers to share 30 seats on each flight that MIAT and KAL operates on this route, charter or not.

operators. No operators indicated that they had had to turn potential clients away for lack of space on international flights. However, there is no doubt that certain business practices of Mongolian Airlines (MIAT) seriously complicate tour bookings: e.g., late announcement of international summer schedules and last minute confirmation of international seat reservations.

Third, domestically, it again appears that seat availability (at least on fixed wing aircraft) is not a principal constraint to the tourism industry. Tour operators suggested that MIAT has limitations, to be sure, particularly in its sometimes haphazard aircraft scheduling and reservation practices in domestic operations. But they also point out that MIAT station managers and middle level personnel consistently attempt to be accommodating to the needs of tour operators.

Fourth, it appears that some additional aircraft capacity for charter flights exists among non-MIAT operators (e.g., air taxi services like Blue Sky Aviation and Hangard) that could be enlisted to obtain space for flying tourists and their baggage to various destinations. Hangard has in fact has been used occasionally by tour operators. Blue Sky is new since November 2000 and its capacities are not well known among tour operators, who apparently believe that its Cessna Grand Caravan aircraft only has limited seats (8) when in fact it could probably be configured for more (12) if demand existed.

Fifth, motivated by MIAT's shaky financial situation, the carrier's management apparently regularly resists giving scope to domestic air operators like Hangard or Blue Sky. From the perspective of MIAT, these air taxis are "creaming" MIAT's market. As the national carrier, MIAT is in a position to pressure Mongolia's Civil Aviation Authority (CAA) to delay and deny landing permission to air operators at regional centers or rural airstrips. Further, as supplier of fuel at regional airports, MIAT can further prevent air taxi service by denying refueling to these air taxis on outbound flights. MIAT apparently uses both tactics to hinder air taxi operations.²

Sixth, there may well be a shortage of charter helicopter seats for tour operators, especially after the January 2001 accident involving one of MIAT's Mi-8 helicopters. If in fact tour operators demonstrate an effective demand for these services, the availability of helicopter capacity for charter from Mongolia's military or from external sources – CAA permitting – is worth evaluating. (Note, however, that when it was suggested to Hangard that this company might take advantage of potential demand for helicopter capacity by leasing a helicopter from abroad, a senior company official maintained that, based on his informal investigation, the costs of doing so would be absolutely prohibitive.)

Recommendations. We offer six recommendations:

1. With respect to privatization of MIAT – USAID/Ulaan Baatar should consider providing advisory assistance to MIAT and to senior policy-making and transportation infrastructure officials of the Government of Mongolia to develop a privatization action plan for MIAT.
2. With respect to international charters – Unless there is a significant demand, in which tour operators could guarantee a passenger base with nearly 100 percent load factors on any flight –round trip – it is impractical to pursue the issue of international charters, particularly with international charter companies directly. However, if in fact a serious shortfall in seat capacity is anticipated at key points in the tourist industry calendar (e.g., Nadam period), a delegation of tourist industry operators and National Tourism Centre officials should meet with MIAT and explore ways in which the national carrier might be willing to wet or dry lease an aircraft for just this peak period. However, in this case, the tourism industry would

² With New Zealand technical assistance, the CAA is in the process of modernizing Mongolia's civil aviation law and regulations. This exercise should lead to a set of draft regulations – as yet unavailable – to make rules on permissions for domestic air chartering more efficient and transparent.

need to be prepared to provide guarantees of traffic volume to share or even absorb MIAT's commercial risk in the charter operation.

3. With respect to international and domestic scheduling/booking problems with MIAT – A delegation of tour operators should meet with senior officials of MIAT and the Ministry of Infrastructure to make them aware of these problems and to make certain that scheduling and booking improvements are critical performance indicators to be negotiated with a future strategic airline partner in a privatization package for MIAT.
4. With respect to domestic air charters – Given the uncertain market demand, plus complications and lack of transparency in present procedures for obtaining permission for domestic air charters, it makes little sense to pursue the issue of domestic charter air services with the various foreign operators of small charter aircraft who would be technically capable of entering this business in Mongolia. However, TCI should encourage local air taxi operators (e.g., Blue Sky and Hangard) to meet directly with Mongolia tour operators to market possible charter services. (If these air taxi operators see that significant effective demand for charter services exists, they will have the incentive to try to regularly navigate Mongolia's difficult system for obtaining permission to operate charters.)
5. With respect to MIAT's blocking of domestic charter operations – A delegation of tour operators should meet directly with MIAT, CAA and Ministry of Infrastructure officials to present specific examples where this practice has impaired tourist industry operations and/or damaged tourist industry image. Further, the delegation should press for liberalization of permission procedures for domestic air charters – MIAT and air taxis freely competing for the domestic air charter business of tour operators – as part of the ground rules of a privatization package for MIAT, with the new civil aviation regulations appropriately drafted to support this approach.
6. With respect to helicopter charters – TCI might encourage two or three local tour operators to join forces and prepare a pro forma request (dates, operating requirements and service days) to submit to some foreign helicopter charter firms, in order to see if interest in providing these services exists, and under what prices, terms and conditions. If offers are forthcoming and economic, TCI could encourage MIAT, Hangard, Blue Sky or others to take on this opportunity.

Sources and contacts. Assembled in Annex File 1 is an extensive set of names, addresses and telephone/fax and email contacts for four different type of airlines that would consider chartering passenger aircraft: major scheduled national carriers based in the US, Europe and Asia; scheduled regional carriers based in the US, Europe and Asia; charter and non-scheduled carriers in the US, Europe and Asia; and providers of helicopter air services in the US, Europe and Asia. These data are drawn from the 2001 World Aviation Directory, the most authoritative single source for such information.

Issue II: Transport Options for Meat Export

Findings - export of canned or dried packaged meat. First, transport options are to ship product in a dry box container by rail or rail/truck to Tianjin, China (port of Xingang) and on by sea to markets in Southeast Asia and Middle East; or alternatively to ship through Russia by rail to the port of Vostochny and onward to target markets. The technology for this move is well within the present capability levels of Mongolia's freight forwarders.

Second, based on discussions with five local freight forwarders, one meat producer and one shipping line, it appears that the shipping corridor through Tianjin is preferable to a routing through Vostochny – despite still unresolved institutional problems for Tianjin (to be addressed below). Insecurity of cargo during shipment through Russia poses too great a transport risk.

Third, using quotes provided by the Ulaan Bataar-based Maersk-Sealand representative, transport prices for this move appear to be very much affordable and will not reduce the competitiveness of Mongolian meat in the target markets.

Fourth, the Tianjin routing does, however, present a major problem: shipment through this corridor will require a transit permit from the Chinese side to allow passage for Mongolian meat products. A concerted effort will be required by the Mongolian Government to negotiate this transit permit.

A summary of these findings is provided in Exhibit 2 A attached, and a worksheet setting forth estimated transport costs for movement of a dry container to Tianjin is presented in Exhibit 2 B.

Findings - export of frozen boxed meats. First, general transport options for the routing of these products are the same as for canned and dried packaged meats: by rail to Tianjin and through the port of Xingang to target markets, or alternatively through Russia to the port of Vostochny and onward. The Tianjin corridor is again preferable given the insecurity of the Russian route.

Second, and most important, frozen boxed meats will require shipment in refrigerated containers (refeers) in any season of the year. This technology poses significant problems:

- Refeers do not now exist in the Mongolia market, and positioning a regular flow of them to accommodate meat export needs will be very costly. Exporters will need to induce shipping lines (which own vast numbers of reefer containers) to begin making their refeers available in Ulaan Bataar.³ The fact that at present no cargo is shipped into Ulaan Baatar by reefer means that one substantial part of the transport cost of exporting frozen boxed meat will be associated with the need to bring empty refeers into Mongolia from the nearest port (i.e., Tianjin) and positioning them at Ulaan Bataar to receive export cargo.⁴

³ Shipping lines appear to be the most likely source of reefer containers for lease for the Mongolian market. The China-based regional offices of several major container lessor firms (e.g., Textainer, Florens, GESEACO) contacted in the course of the present analysis declined any interest in supplying refeers for the proposed Mongolia export operation, principally because of the relatively small number of refeers to be involved and the difficulties in repositioning refeers in Ulaan Baatar.

⁴ In theory, a meat exporter directly purchasing his own dedicated set of refrigerated containers, or leasing these refeers for an extended period of time, could resolve the problem of non-availability of refeers in Ulaan Baatar. Based on current information, a good second-hand container can be acquired in China for about US \$ 3000; and container lessor Trikooll Containers of Hong Kong quotes prices of US \$15 per day for lease of a twenty-foot reefer and US \$ 40 per day for lease of a required accompanying clip-on generator set. With a supply of refeers in hand, the exporter could take charge of the Ulaan Bataar to Xingang port leg of the export trip: he would stuff these containers at his factory in Ulaan Baatar, ship the loaded refeers to Tianjin, and then destuff them at Xingang port and immediately transfer the cargo of frozen boxed cuts to refeers owned and provided at Xingang port by a shipping line. Next, at this own expense, the exporter would ship his empty refeers back to Ulaan Bataar, clean and ready them for a new export shipment to Xingang port. In the meantime, the shipping line would move the reloaded refeers from Xingang port to their final destination, and would on its own account reposition empties back in Xingang port for the next round of shipments. However, even if the financial cost of this approach appeared to be affordable on paper, the disadvantages could be considerable. In owning refeers and taking responsibility for the most difficult leg of the shipment (Ulaan Baatar to Tianjin and Xingang port), the exporter would be expanding considerably his overall risk in the export operation, as compared with an approach in which he entrusted the entire transportation task to an expert shipper, experienced in reefer technology and prepared

- Power sources are essential to maintaining freezing temperatures for the refeers. In more developed markets, this power is provided by simply plugging a reefer into an electricity source on a train, truck or ship. But MTZ and (possibly) the Chinese railway lack these power sources. Detachable, diesel-fuel-powered generator units could be fixed to refeers to overcome this problem, but leasing these units will add to the cost of transportation.
- Risk of cargo loss (meat spoilage) from temperature variation is significant, and this risk is intensified by possible transit delays on the Ulaan Bataar to Tianjin leg of the export journey. Reefer shipments would require constant monitoring and carefully organized back-up procedures to keep refrigeration in place during delays in transportation.

Third, very recently, one major shipping line (Maersk-Sealand) has assigned a staff member to Ulaan Baatar on a full-time basis with a mandate to develop a reefer business, among other activities. The presence of this company in Ulaan Baatar is very positive and provides resources and expertise to begin to solve the reefer container technology problems of Mongolian meat exports.

Fourth, because of the novelty of the concept of reefer operations from Ulaan Baatar, no detailed transport price quotes are available to estimate the cost of shipping frozen boxed cuts to Southeast Asia or the Middle East. However, based on a rough first evaluation, it is possible that transportation costs for reefer shipments to target markets could be on the order of 50 percent higher than for the same move by dry boxes, chiefly because of the Ulaan Baatar to Tianjin to segment of the trip. (We will make detailed estimates as soon as data become available.)

Fifth, the problem of obtaining a transit agreement for passage of these meat products across China would still need to be resolved.

A summary of these findings is presented in Exhibit 3 attached.

Findings – Export of frozen boxed cuts or chilled boneless cuts by air to the Middle East at special yearly periods (i.e., Ramadan). First, although cost quotes have yet to be received, no major Asian, European or North American charter airfreight operators are likely to be cost competitive for this operation. The most probable source of charter airfreight capacity would be one of the charter operators in the former Soviet Union, using Soviet-made freighter aircraft.

Second, at least one such operator (in Uzbekistan) has expressed interest in the operation, and has committed to provide cost quotes through a London-based airfreight broker contacted during the course of this analysis. These data have not yet been submitted, so the feasibility of export by airfreight is still speculative, but transport costs will no doubt amount to at least US \$ 2 per kg.

Sources and contacts. The World Aviation Directory presents names, addresses and telephone/fax/email contacts for charter operators of small- and medium-sized freighter aircraft. These are contacts are included in Annex File 1.

Recommendations

1. With respect to transportation priorities for meat exports – Given the relatively manageable transportation factors for export of canned or dried packaged meats by dry box container, TCI should give highest priority to encouraging this export operation. TCI should defer emphasizing export opportunities for frozen boxed cuts in the near term, or at least until a

to take over the entire refrigerated cargo move from Ulaan Bataar to the final destination. In particular, the requirement for destuffing and restuffing refeers in Xingang port would add significant technical risk and cost for the exporting firm.

shipping line (e.g., Maersk-Sealand) is prepared to make reefers available in the Ulaan Bataar market at competitive prices and take charge of the export shipping operation.

2. With respect to the transit agreement with China – This is the major obstacle in Mongolia’s meat export operation to new markets in Southeast Asia and the Middle East. TCI (and by extension, USAID/Ulaan Baatar) should use its influence to focus Government of Mongolia policymakers on the importance of negotiating this agreement, starting with obtaining permission for the transit of Mongolian canned and packaged dried meat products across China.
3. With respect to dry box export for canned and dried packaged meats – TCI should sponsor a seminar assembling meat exporters, freight forwarders/shipping lines and government officials responsible for negotiation of a transit agreement with China to discuss the operational details and costs for dry box shipment of products through Tianjin. This seminar would help build domestic understanding of the importance of the canned and dried packaged export opportunity, and give impetus to Government of Mongolia efforts to negotiate a transit agreement.
4. With respect to reefer technology – TCI should work with Maersk to sponsor a seminar for meat exporters, freight forwarders and government officials on “Cold Facts,” designed to educate interested parties on the technology, opportunities, problems and costs of using refrigerated containers in the export market.
5. With respect to transport costs relative to export prices – TCI should continue to press (a) Maersk-Sealand for cost data associated with a reefer move between Ulaan Baatar and target export markets, and (b) air cargo brokers for cost data associated with Ramadan-based air freight shipment of meat to target markets in the Middle East. Additionally, TCI should sponsor or encourage some additional market research on price levels and margin structure in the target markets, with a focus on identifying specific prices (Delivered Duty Unpaid) for canned or dried packaged products in consumer preferred sizes, and for frozen boxed cuts and chilled boneless cuts. These prices would provide a more precise frame of reference in which to measure and confirm the affordability of transportation costs for Mongolia’s meat exporters and Government policymakers, especially for frozen boxed cuts and chilled boneless cuts.

Issue III: Illustrative Transport Cost Data for Asia

Exhibit 4 provides data on cost of surface transport of a twenty-foot container between illustrative points in Asia.

Exhibit 5 provides data on cost of air cargo transport between illustrative points in Asia.
