



White Paper

Where Would You Build a Hub to Connect the World's Three Largest Aviation Markets?

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Abstract

Little known outside of Russia, S7 Airlines (S7) is now directing some of its efforts and resources in developing its hub in Novosibirsk (OVB) in cooperation with the owners of the airport.

Admittedly, the hub will not be large by international standards. The airport itself expects around 1 million connecting passengers this year. However, some of the characteristics of this duo are such which open the potential for OVB to become a hub of global proportions connecting Asia, North America and Europe. Should this scenario become reality, it would have an impact on many international hubs around the world.

In this white paper, ICF outlines the pros and cons of such a scenario developing.

Going back to Siberia

Today, S7 is the second largest airline in Russia and transported somewhat more than 13 million passengers in 2016. In the Soviet times it used to be Aeroflot's OVB unit, but after several rounds of privatisation, it is privately owned.

At one point during the last decade, S7 moved its headquarters and most of its operations to Moscow, but it has never completely abandoned OVB and retained some of its fleet and an MRO there. Building on its position at OVB, S7 is now re-focusing on the city and developing a regional hub there with Embraer 170s. The business case is partially built on government subsidies to regional services in that part of Russia, and partially on the disappearance of some of the competition after Transaero—the previous no. 2 in Russia—went bankrupt in 2015.



Novosibirsk, Russia

Even with government subsidies, the potential of the hub is limited in its current form. After all, Novosibirsk is not a very large city with 1.6 million inhabitants, and that part of the world is very sparsely populated. (For more information about S7's plans, see <http://www.rusaviainsider.com/s7-novosibirsk-homecoming/>.)

Stepping up to a global playing field

At this stage, S7 is targeting the traditional routes of that region. However, thinking outside the box, a hub in OVB seems to have a much bigger potential. It is located conveniently between Asia and Europe, as well as South Asia and North America. And these are the biggest aviation markets of the world. Connecting all of them through one hub would probably not be bad business. And from this perspective the question becomes: should S7 take the next step and expand its currently small domestic hub into something much-much larger?

A few possible pros that S7 may consider include the following:

1. Hubbing through OVB offers a distance advantage over alternative hubs when connecting certain regions of the world as it is positioned close to the great circle routes between many important points. The map below shows a few such routings, while the table on the next page shows distances connecting some South Asian cities to the United States and Europe. OVB has an obvious advantage on some routes which in practice translates to a cost advantage.

OVB'S UNIQUE GEOGRAPHIC ADVANTAGE AS A HUB



Source: gcmmap.com

O&D	Miles	O&D	Miles	O&DW	Miles
BOM-LAX	8709	BKK-MIA	9715	URC-FCO	3684
BOM-OVB-LAX	8710 +0%	BKK-OVB-MIA	9788 +1%	URC-OVB-FCO	4012 +9%
BOM-LHR-LAX	9943 +14%	BKK-LHR-MIA	10383 +7%	URC-DXB-FCO	4916 +33%
BOM-ICN-LAX	9445 +8%	BKK-ICN-MIA	10024 +3%	URC-SVO-FCO	3816 +4%
BOM-DXB-LAX	9537 +10%	BKK-DXB-MIA	10896 +12%	URC-FRA-FCO	4173 +13%
BOM-JFK	7799	DAC-JFK	7880	URC-IST-FCO	3803 +3%
BOM-OVB-JFK	8228 +6%	DAC-OVB-JFK	7886 +0%	URC-HEL-FCO	4153 +13%
BOM-LHR-JFK	7938 +2%	DAC-LHR-JFK	8440 +7%	SGN-CDG	6285
BOM-ICN-JFK	10357 +33%	DAC-ICN-JFK	9231 +17%	SGN-OVB-CDG	6567 +4%
BOM-DXB-JFK	8047 +3%	DAC-DXB-JFK	9050 +15%	SGN-DXB-CDG	6754 +7%
SIN-JFK	9537	PEK-LIS	6015	SGN-SVO-CDG	6331 +1%
SIN-OVB-JFK	10216 +7%	PEK-OVB-LIS	6026 +0%	SGN-FRA-CDG	6286 +0%
SIN-LHR-JFK	10216 +7%	PEK-DXB-LIS	7460 +24%	SGN-IST-CDG	6495 +3%
SIN-ICN-JFK	9773 +2%	PEK-SVO-LIS	6035 +0%	SGN-HEL-CDG	6469 +3%
SIN-DXB-JFK	10481 +10%	PEK-FRA-LIS	6018 +0%	CAN-OSL	5235
HKG-ORD	7794	PEK-IST-LIS	6413 +7%	CAN-OVB-OSL	5238 +0%
HKG-OVB-ORD	8502 +9%	PEK-HEL-LIS	6024 +0%	CAN-DXB-OSL	6822 +30%
HKG-LHR-ORD	9947 +28%	HKG-LHR-ORD	9947 +28%	CAN-SVO-OSL	5358 +2%
HKG-ICN-ORD	7836 +1%	HKG-ICN-ORD	7836 +1%	CAN-FRA-OSL	6325 +21%
HKG-DXB-ORD	10931 +40%	HKG-DXB-ORD	10931 +40%	CAN-IST-OSL	6438 +23%
				CAN-HEL-OSL	5252 +0%

- S7 does not need to pay Siberian overflight fees. This in itself can generate around 5% points of cost advantage.
- Operating long-haul out of OVB, S7 would have good chances of obtaining bilateral traffic rights.
- Many of the Asia-Europe O&Ds could be operated with narrowbody aircraft which would imply some cost advantage and lower risk. Note the newest long-range narrowbodies like the A321LR can cover the whole of Eurasia and a big part of Africa from OVB.
- Air traffic control charges in Russia are lower for local airlines than for foreign carriers. This in itself can add another couple of percentage points of cost advantage.
- OVB is not a congested airport. S7 can design its hub structure freely. Also, aircraft need less taxiing and holding in the air compared to some congested hubs.
- S7 has very low CASK and, generally, the operations in Siberia are cost efficient.



8. S7 can count on all the lobbying power and support of Novosibirsk which is the third largest city in Russia and a substantial economic centre.
9. Trade unions play a negligible role in Russian aviation—a minor advantage for S7 over Western competitors.

Of course, there are many hurdles that S7 would need to overcome if it were to operate a sizeable international hub at OVB. A few cons to be taken into consideration include the following:

1. The hub would need to rely almost completely on connecting traffic, since local traffic is small. This increases the commercial risk of the business.
2. Much of the opportunity lies in long-haul operations, while S7 is predominantly a short-haul airline. This increases the risks further, as opening a long-haul route implies more financial investment, and in this case, several long-haul routes would need to be opened to reach a critical volume of possible connections.
3. There are many airlines competing for the Asia-Europe transfer traffic. For example, Air Astana is in a rather similar geography, while the Middle East carriers have been building their hubs for a long time now. This implies the constant risk of price wars and potentially low yields.
4. The Asia-North America market is less congested, but again, there are many competitors.
5. S7 is virtually unknown outside of Russia despite its oneworld membership. The airline would need to build its brand abroad which is a time-consuming and expensive undertaking. And again, competition is strong (e.g. Emirates, Korean Air, Lufthansa, etc.).
6. Hubs in the North imply the risks of weather-related disruptions and higher costs of operating in winter conditions. In comparison, Moscow, Copenhagen and Stockholm are on similar latitudes, while Helsinki and Reykjavik are much to the north, although with more moderate climates.
7. Although the airport is constantly being developed, at the moment, OVB is not set up to handle substantial transfer traffic. On the other hand, it is owned by private investors who would probably be willing to invest to attract more transfer traffic.

Conclusion

In summary, the potential gains for both S7 and OVB are huge, but so are the needed investment and the risks as well. In a few years, we will see how S7 itself has judged this opportunity.

Regardless of how S7 decides, the opportunity discussed above shows the directions Russian airlines and airports will need to take once they exhaust their current opportunities:

- Leverage the country's size, geography and bilateral relations to build up 6th freedom traffic. This will diversify revenue away from the still

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maturing and therefore volatile home market towards bigger and more stable international markets.

- Gradually address the different bottlenecks which currently limit growth (e.g. risk sharing between airports and airlines, access to more favourable sources of finance, improvement of operations in adverse weather, growing capacity allowed by bilateral agreements, know-how of selling to international passengers, different infrastructure constraints, etc.).

Should S7 and OVB take this direction, other hubs and airlines who transport passengers between Asia, Europe and South Asia and North America will all feel the effect of a strong competitor coming onto the market with low costs of operations. The implications can be similar to what we have witnessed on the Trans-Atlantic routes where Icelandair and Wow Air's hubbing operations in Reykjavik have started to erode the yields of the established legacy players while managing to carve out a profitable niche for these two airlines.

About the Author

Andras Bogнар is an aviation economist in ICF's London office. Over the last 15 years he has worked extensively in the aviation industry, specialising in airlines and airports. Andras speaks Russian fluently and has worked on numerous projects in Russia and the CIS. As an economist, Andras' technical skills are in forecasting, financial modelling, business process re-engineering, organisation

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