**Russia has a large requirement for aircraft, but import taxes are restricting the market. Aircraft needs to have a low value to be viable under the taxation system. There are ways to reduce tax exposure, but few lessors are willing to take the associated risk.**

# The implications of Russian import taxes

Russian tax regulations on western aircraft are a hurdle in country's the development of air transport. Import duty, value added tax (VAT), and sales tax determine the economics of operating leases or purchases. Lessors pass these taxes on to the lessee in the form of higher monthly lease rentals. These inflated lease rates are beyond the financial capability of Russian carriers, and few western aircraft operate in Russia as a result.

Aircraft and taxation options may change this equation. Leasing airframes that are worth only a nominal amount or utilising taxation options that reduce tax exposure are possible solutions to high import taxes.

These may also provide the only option since few Russian airlines are taking delivery of new western aircraft, and only 10 new Russian aircraft have been sold or leased in the last five years.

Several Russian carriers have tried to use western aircraft in the past, but most have encountered difficulty with the tax regulations. Baikalavia's 757 was impounded and returned to the US lessor by the tax authorities, while Krasnoyarsk Avia and Avcom both returned their DC-10s prior to the expiration of tax holidays. None of the carriers have sought equivalent replacements.

European airport noise limits make Russian aircraft less attractive. Aeroflot's fleet of Tu-134s are banned from flying to Europe because they do not comply with Stage III noise rules, while Egypt has recently banned the Il-86.

## Taxation environment

All western aircraft are liable to several Russian taxes, which inflate their cost. Western aircraft are subject to 20% import duty (based on stated hull value). This only has to be paid on aircraft that have been operated by a Russian airline for 365 days. A further 20% VAT (although special exemptions may apply) has to be paid on the gross value of aircraft and import tax. The two therefore compound to 44% of the aircraft's value.

Additionally, a withholding tax of 10-20% is applied to lease payments made to a foreign lessor. A further 2% property tax is applied if the aircraft is included on the balance sheet of a Russian company.

Ekaterina Lazorina, taxation senior manager at Price Waterhouse Coopers in Moscow, explains the taxes. "The withholding tax is a sliding scale, which is 10% if the aircraft is used for domestic operations, or 20% if it is used for international operations. If an airline intends to use the aircraft in both spheres, then the higher (20%) tax would probably be applied. Tax law is unclear on this point.

"Property tax applies to any entity that has property in Russia. A number of double taxation treaties (DTTs) contain provision for exemption from property tax," continues Lazorina. "If an aircraft is a temporary import, and will only be in Russia for a short period, then property tax may not apply, but this is an interpretative area."

"Overall, the tax exposure for both lessor and lessee is governed by how the lease is structured. Expertise in the tax structure is needed to ensure that tax commitments are kept to a minimum," says Lazorina.

Import tax, VAT and property tax equate to 47% of an airframe's value. For example, this takes the value of a 737-700, with a purchase price of $40 million, to a total amount approaching $59 million.

If this type of aircraft were leased, lease rates would be charged on a net basis by the lessee, but import tax and VAT would be calculated on the value of the aircraft. These taxes would require additional financing over the term of the lease. Monthly payments would be less for a longer term, making longer leases more economic. Withholding tax would then be applied to 20% of this monthly payment.

Roland Moore, a US-based Aviation Attorney, explains: "All leases are based on a net basis, or zero tax calculation. The lessor knows what return it wants from its aircraft as in a normal lease, and the lease rate reflects that. Whether the lessee has a tax burden is immaterial. The lessee must calculate the tax burden when determining the viability. In Russia, the amount the airlines have to pay to lessors does not make any consideration for taxation."

The net lease rate for a 737-700, for example, will be about $360,000 per month *(see table, page 6)*, based on a lease rate factor of 0.9%. The import tax, VAT and property tax would compound on the $40 million aircraft to $18.752 million *(see table, page 6)*. This would be financed by the lessee over the term of the lease, say 10 years, at about 6% interest. This would take the monthly payment to $568,000. Withholding tax of 20% would be applied to this taking the monthly payment up to $681,840, an increase of more than $320,000 on the net lease rental. Examples for other aircraft types are shown *(see table, page 6)*.

These high monthly rates make new aircraft uneconomic, and unaffordable even for western airlines.

The taxes were created to protect the Russian aerospace community from its western counterparts. With few Russian

**FULL EFFECTS OF IMPORT TAXES ON WESTERN AIRCRAFT LEASED INTO RUSSIA**

| Aircraft | 737NG/A320 | 737-300 | MD-80 | DC-9 | 737-200 |
|---|---|---|---|---|---|
| Purchase price-$ | 40,000,000 | 11,000,000 | 2,700,000 | 2,200,000 | 2,200,000 |
| Import duty (20%) | 48,000,000 | 13,200,000 | 3,240,000 | 2,640,000 | 2,640,000 |
| VAT (20%) | 57,600,00 | 15,840,000 | 3,888,000 | 3,168,000 | 3,168,000 |
| Property tax (2%) | 58,752,000 | 15,840,000 | 3,888,000 | 3,168,000 | 3,168,000 |
| Taxes | 18,752,000 | 4,840,000 | 1,188,000 | 968,000 | 968,000 |
| Lease length-years | 10 | 10 | 10 | 10 | 10 |
| Lease rate factor-% | 0.90 | 1.10 | 2.00 | 2.00 | 2.00 |
| Net lease rate-$ | 360,000 | 121,000 | 54,000 | 44,000 | 44,000 |
| Debt rate-$ | 6 | 6 | 6 | 6 | 6 |
| Tax repayment-$ | 208,200 | 53,734 | 23,000 | 18,715 | 18,715 |
| Gross payment-$ | 568,200 | 174,734 | 77,000 | 62,715 | 62,715 |
| Witholding tax (20%) | 113,640 | 34,947 | 15,400 | 12,543 | 12,543 |
| Total payment-$ | 681,840 | 209,681 | 92,400 | 75,258 | 75,258 |

aircraft manufactured and purchased, the relevance of, or requirement for, this protection is debatable. Industry estimates place production capacity at 10 aircraft per year, with only 29 aircraft being manufactured in the past six years.

With a few exceptions, Russian airlines have not purchased or leased new aircraft from western manufacturers. Aeroflot has recently leased 18 A320s and has previously acquired 777s and 737-700s, but the Russian government waived the taxes that were due from these transactions. It is speculated that this was done as part of a deal to stop the US blocking Exim funding for Aeroflot's purchase of Il-96Ms.

Russian avionic and engine manufacturers have also raised concerns about western competition, and a ratio tax rate is applied to hybrid aircraft. Hybrids like the Tu-204, which uses Rolls-Royce engines and Rockwell Collins avionics, attract sales and import tax as a percentage of the build cost. If the western engines and avionics of the Tu-204 equate to 50% of the overall build cost, 20% duty and 20% VAT would be applied to half the value of the aircraft. The attraction of operating a western-derived Tu-204 would be reduced by the large tax burden it would assume in comparison to its fully Russian-equipped equivalent.

## Tax Reduction

Apart from the granting of ad-hoc tax waivers, Russian operators have few options for avoiding the taxes applied to aircraft.

One option is to take advantage of the existing 364-day import duty rule. Under this rule an aircraft is not taxed unless it has spent a full year operating in Russia, thereby avoiding the 20% import duty until it has spent 366 days with a Russian carrier.

Depending on lease structures, import duty can be exempted if the lessor is willing to accept multiple one-year leases. The aircraft can remain in Russia between these leases, and the operator can apply for import duty exemptions.

This will generate some savings for the operator, but requires the lessor's consent for multiple single-year contracts. Triple J Leasing arranged this type of deal when it leased a 737-200 to Air Kazakhstan.

"To qualify for a tax exemption in a multiple one-year lease contract the aircraft does not have to be exported from Russia at the end of every year," explains Moore. "The lease has to have a separate contract for each year to get import duty exemption. A single contract for several years invalidates this option. The greatest problem is getting the lessor to agree to a lease that is negotiated in multiples of one year. The risk is high if the carrier has the possibility of returning the aircraft at the end of every year. "

VAT is applied the the aircraft's value at 20%. The withholding tax that is due on lease payments is a variable amount, dependent on the aircraft's role. The tax is 10-20%: 10% if the aircraft is used on domestic routes; or 20% if it is used on international routes. Most Russian airlines would operate these aircraft into European airports. It is doubtful that Russian carriers would lease a western aircraft, and absorb the relevant taxes, to operate domestic routes.

There are several options for reducing exposure to withholding tax.

"Withholding tax is applied to the lease payments made to a foreign lessor. In practice, this is not a problem if the lessor is from a DTT country, and the DTT allows a tax exemption for taxation of lease payments in Russia," explains Lazorina. "A 2% property tax is not levied on operating lease rentals."

Withholding tax is paid if a profit is made on an investment. To avoid this tax it is possible to create a non-profit structure that reduces the tax exposure. However, this may require the lessor to transfer title to a Russian-registered company, or a company based in a country that has a DTT with Russia.

Some carriers such as Germania and KrasAir are already becoming more innovative in deal structures to avoid tax. KrasAir is seeking to lease MD-80s from Germania, with the two companies proposing to launch a joint leasing company. Germania will get 90-95% ownership of the proposed company, in return for transferring title of the MD-80s. KrasAir will then lease the MD-80s from the company, avoiding the withholding tax, because it is a Russian company. The risk to Germania is the transfer of free title, which removes their asset base in the event of default. This is a test-case, and its developments are being watched by other entities. The proposal is legal and has not been challenged. If it proceeds other companies may seek to pursue this option.

## Taxation developments

Future tax relief, and the potential reduction or abolition of the relevant duties, is a possibility. Industry analysts expect to see a reduction in the taxation levels based partly on the poor performance of the Russian aviation sector, but more importantly on Russia's proposed entry to the World Trade Organisation.

There is precedence for this view, because the import duty has already had a 10% reduction to 20%. The state customs committee has supported a reduction of import duty to a level between 0-5%. A condition to this proposal is that imported aircraft do not have a direct counterpart in Russia. This is vague for some aircraft types. An obvious victim of this rule is the 757, as the Tu-204 is a close rival. It is less clear how the A320 and 737-800 compare with the Tu-154.

## Aircraft options

If the taxes are not reduced, and airlines are unable to afford new aircraft, what are their options? They could purchase Russian aircraft, but with noise restrictions in most western airports, a lack of funding options and few available for purchase or lease, they are not a realistic option for Russian airlines.

Russian airlines could purchase older western aircraft that are cheaper and have several years of life remaining. The MD-80, 737-200 and DC-9 are worth a nominal amount, while their engines (often the JT8D) also have minimal value. These aircraft are not required in the west and lessors will be willing to part with them for relatively little money, since few alternative uses exist.

An MD-80 has a value about $1.5 million, depending on residual flight cycles (FC). The DC-9 and 737-200 would have similar, or lower, values. Refurbishment cost is estimated to be $1.2 million for US-based aircraft, taking the value to $2.7 million. The taxes due on these aircraft, if they were deployed in Russia, would take their value to about $3.2-3.8 million.

Based on this scenario, a five-year monthly payment would be about $75,000-92,000 *(see tables, pages 6 & 7)*. This compares favourably to a 737-700 payment that would be about $680,000 per month, based on a 10-year lease.

A lessor may accept an even lower rate for these older aircraft, providing that the carrier intends to use the aircraft for a significant time, or is willing to invest in the refurbishment cost itself.

## Aircraft limitations

While the option of supplying older aircraft to Russia has been discussed for some time, and is sound in theory, many practical difficulties exist. The majority of parked aircraft are US-based, and they would require significant investment to bring them up to EU/Russian standards.

All Russian aircraft must be JAROPS 1 compliant. That is, certified to European standards. The 737-200, MD-80, and DC-9 parked by US airlines are not. Additionally, the aircraft will spend the majority of their time operating to European airports, where noise compliance will be an issue.

If the aircraft operated to Europe, however, their Traffic Collision Avoidance System (TCAS) would need to be upgraded to version 7. The VHF radio would need to have a wider band-width to avoid radio clutter.

Further modifications required to bring US-based aircraft to minimum compliance levels would include replacing the galleys from their existing US configuration to a European standard. Also, US aircraft fuel gauges would need to be converted from pounds to kilograms, and this conversion alone is valued at about $130,000.

The cost of converting a US-based 737-200, MD-80, or DC-9 is estimated to be $1.0-$1.2 million. This is a similar amount to that spent by Triple J when leasing the 737-200 to Air Kazakhstan. The cost of converting European-based aircraft would be lower, as would the resulting monthly payments.

It is not impossible to convert US aircraft to Russian standards, but US lessors would be wary of further investment in an aircraft that would have no value to them if it were returned early from its lease. Weighing the cost of investment against the risk of default would deter most lessors from pursuing this opportunity. They would be more willing to write the asset off at a nominal value now, rather than have it returned early after 12-24 months of significant investment but limited return.

The most realistic option for sourcing these aircraft would be if the airline was willing to fund the conversion. This would secure a competitive lease, but the airline may not agree to the initial investment required.

Another solution would be to acquire used European aircraft, like MD-80s or 737-200s, because the galleys, gauges, noise emissions, TCAS, and JAROPS are already EU-compliant.

While older aircraft have low values, expensive bridging maintenance will be required. When transferring an aircraft from a US carrier to another carrier the maintenance register is altered. Airlines have their own maintenance planning documents (MPDs), which include check interval extensions. Sale of an aircraft would reverse interval extensions. Many life limited parts would also need replacing. A lot of bridging maintenance would therefore be required to restore the aircraft to default MPD levels, thereby requiring additional investment.

### EFFECTS OF REDUCED IMPORT TAXES ON WESTERN AIRCRAFT LEASED INTO RUSSIA

| Aircraft | 737NG/A320 | 737-300 | MD-80 | DC-9 | 737-200 |
|---|---|---|---|---|---|
| Purchase price-$ | 40,000,000 | 11,000,000 | 2,700,000 | 2,200,000 | 2,200,000 |
| Import duty (0%) | 40,000,000 | 11,000,000 | 2,700,000 | 2,200,000 | 2,200,000 |
| VAT (20%) | 48,000,000 | 13,200,000 | 3,240,000 | 2,640,000 | 2,640,000 |
| Property tax (0%) | 48,000,000 | 13,200,000 | 3,240,000 | 2,640,000 | 2,640,000 |
| Taxes | 8,000,000 | 2,200,000 | 540,000 | 440,000 | 440,000 |
| Lease length-years | 10 | 10 | 10 | 10 | 10 |
| Lease rate factor-% | 0.90 | 1.10 | 2.00 | 2.00 | 2.00 |
| Net lease rate-$ | 360,000 | 121,000 | 54,000 | 44,000 | 44,000 |
| Debt rate-$ | 6 | 6 | 6 | 6 | 6 |
| Tax repayment-$ | 88,800 | 24,400 | 10,500 | 8,500 | 8,500 |
| Gross payment-$ | 448,800 | 145,400 | 64,500 | 52,500 | 52,500 |
| Witholding tax (20%) | 89,760 | 29,080 | 12,900 | 10,500 | 10,500 |
| Total payment-$ | 538,560 | 174,480 | 77,400 | 63,000 | 63,000 |

## Alternatives

The initial investment required by the lessor to make older aircraft comply with JAROPS 1, TCAS, VHF, MPD/maintenance, and galley requirements may be unacceptable when the risk of default is considered.

Lease companies would be more comfortable offering 737 Classics (-300/-400) that are compliant in all the listed areas, requiring limited further investment. A 737-300/-400 that already operates to most European airports is JAROPS and TCAS compliant. It would require minimal up-front investment from leasing companies to comply with EU and Russian regulations. These aircraft have diminished placement opportunities with western carriers, but enough market demand to reduce the lessor's exposure should they be returned early from lease. A 737-300 lease would be negotiated for $120,000-140,000 per month. This would be increased to about $210,000 if all taxes were applied *(see table, page 6)*.

Lessors are sceptical about the viability of placing 737 Classics into the Russian marketplace, because their hull value is still relatively high. The tax environment makes these aircraft expensive. There are many 737 Classics available to lease, and the Russian market is an obvious area for placement. If restrictions are lifted many lessors would seek to place aircraft in the Russian market, but until then lessors are cautious about dealing with any but the largest Russian airlines, as the risk of default is greater in smaller airlines.

Taxation is still a problem with these aircraft, because they have a higher hull value than a DC-9, MD-80, or 737-200.


*The combined effect of all Russian taxes and additional maintenance and modification costs makes leasing of used aircraft with low market values uneconomic for most Russian carriers; with weak revenue streams.*

Several tax waivers have been secured, however, the most recent being an allowance for Aeroflot to replace its 737-400s with 16 A320s on a one-for-one basis.

The two options and costs for a Russian airline leasing aircraft with all taxes applied and some taxes avoided are shown *(see tables, pages 6 & 7)*.

The first scenario shows the cost impact and lease rate of aircraft that are fully exposed to taxation *(see table, page 6)*.

The second scenario shows the reduction in the lease rate if the operator is able to avoid import duty (of 20%) and property tax (of 2%) *(see table, page 7)*.

While the MD-80, DC-9, and 737-200 have low values, and are therefore attractive to airlines, the technical problems and taxes associated with placing these types may preclude them from operating, as occurred with KrasAir's recent attempt to secure MD-80s.

The 737-300 is the most realistic alternative, since it is EU compliant, already operating in Russia, and much cheaper than the 737NG/A320 option *(see tables, pages 6 & 7)*. The monthly rate for a 737-300 is reduced from $210,000 to $175,000 when import duty and property tax are avoided.

## Maintenance support

Operating western aircraft in Russia would cause logistical problems, as the supply of spares would have to be managed. These aircraft are not common in Russia, and a spares inventory would need to be provided. The biggest issue regarding maintenance is the supply of spares. Spare parts are also liable to the existing taxation regulations, meaning that the trade value of a part must be levied with the same 44% import tax and VAT as the airframe. A replacement engine costing about $500,000 would have a tax level of $220,000. The total equipment cost would depend on the parts required above the minimum equipment list, and their book value for tax purposes.

## Aircraft registration

The Russian Aviation Authority (RAA) requires that an aircraft operating in Russia be registered in Russia. However, this requirement is waived if the aircraft is registered in another country that has a bilateral arrangement with the RAA on maintenance of airworthiness standards. Registering the aircraft in Russia does pose some risk, as Russian courts will not enforce the judgement of a US or UK court. Should the lessee default on lease payments, the lessor would probably have to use the Russian judicial system to enforce its rights of ownership. Russia is a signatory of the convention recognising foreign arbitration awards, so a Russian court should recognise rulings made in a US court, but this has not been tested. If a dispute were to arise over lease payments the plaintiff must pay initial court fees, which can range from 0.5-5% of the total claim value. Previous disputes that have arisen between lessor and lessee have often used arbitration.

## Airport requirements

Runway construction can be an issue when using western aircraft on Russian domestic services. The pavement loading of some Russian runways is below the maximum landing weight of the MD-80 and DC-9, meaning these aircraft cannot operate to all airports. The softer runway paving of Russian airports means that repeated use of such aircraft will damage the paving, and, in extreme cases, cause them to sink into the runway. The minimum pavement compression number (PCN), based on main gear weight, of western airports is 44,000kg. The MD-80's PCN is 19,950kg, while the DC-9's and 737-200's are 15,277kg and 17,150kg respectively. PCN issues would also apply to new aircraft, with a 737-700 PCN of 22,850kg. While the PCN of Russian airports is difficult to determine, it is estimated that 12 out of 107 operational airports (11%) would be unable to handle these aircraft. Therefore, by operating these aircraft types, approximately 11% of Russian airports would not be able to be served.

## Summary

The current environment for all aircraft sales in Russia is very limited. Airlines are financially weak. The tax laws are being examined by the Russian government, and may eventually be reviewed or even abolished. This will not happen in the short-term.

Russian aircraft are built in low volumes, but also difficult to finance. Import taxes, used to protect the Russian manufacturing industry, are hurting the airlines. If this situation is not resolved, the growth in air travel will be met by foreign carriers, reducing Russian airlines to minor players in their own market. AC