RESEARCH



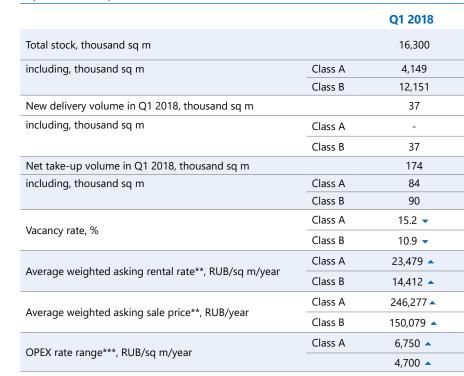
Q1 2018 OFFICE MARKET REPORT Moscow

HIGHLIGHTS

- The delivery volume of quality office space totaled 37 thousand sq m by Q1 2018 results
- The vacancy rate came up to 15.2% in Class A offices and 10.9% in Class B offices by the end of Q1 2018, reaching circa 1.96 million sq m in aggregate
- The average rents got a boost of 2.4% running up to 23,479 RUB/sq m/year for Class A space and 14,412 RUB/sq m/year for Class B space

OFFICE MARKET REPORT MOSCOW

Key indicators. Dynamics*



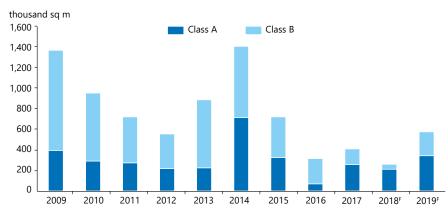
Compared to Q4 2017

** Excluding operational expenses, utility bills and VAT (18%)

*** OPEX rate does not consider change related to property tax rate increase

Source: Knight Frank Research, 2018

Class A and B new delivery volume dynamics



Source: Knight Frank Research, 2018



Konstantin Losiukov Director, Office Department, Knight Frank

"The market reversal towards growth recorded in H2 2017 also became a trend for Q1 2018. The rental rates were rising, while the vacancy rate both in Class A and Class B offices was falling, driven by the strong demand against low rates for the new construction. In general, the scenario was similar to the one we saw after the 2008 crisis when the demand had been growing more dynamically than new space had been delivered. That phenomenon helped the market to get rid of the crisis extremities, characteristic for 2015-2016. The trend may stay unchanged both until the end of 2018 and H1 2019".

Q1 2017 RESEARCH

Supply

The total supply of quality office space in Moscow amounted to 16.3 million sq m, where 25% were classified as Class A offices and 75% as Class B officese.

The delivery volume of quality office space was 37 thousand sq m by the results of Q1 2018, which was 1.8 times higher than for the same period in 2017. Interestingly, all space delivered in Q1 corresponded to Class B grade. The commissioning of new office space would be at a minimum level throughout the year despite the new construction growth registered in Q1 2018.

The Class A vacancy rate fell by 1.9 p. p. against the end of 2017 to 15.2% or 631 thousand sq m as a result of low volumes of new construction together with stable demand characterized, in particular, by the withdrawal from the market of a number of large office units with an area of more than 10 thousand sq m.

The Class B vacancy rate also remained in a downtrend from the last year and reached 10.9% or 1,325 thousand sq m in absolute terms.

The overall level of Class A and B vacant space was 1.96 million sq m. Its further reduction is projected till the end of 2018.

The largest change of the vacancy rate occurred in Q1 2018 in the following business districts of Moscow:

The Class A vacancy rate dropped down by 12 p. p. against the end of 2017 till 15.6% or 19.5 thousand sq m in the south-west between the Third Transport Ring and the Moscow Ring Road due to several transactions in Lotus Business Centre.

The net take-up and vacancy rate dynamics

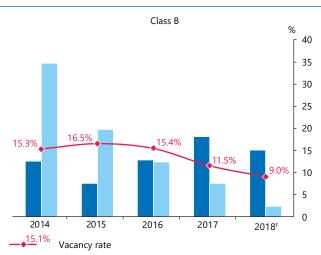
Dmitrovsoe Hw NA Altufievskoe Hwy 15 000 m Volokolanskoe Hwy holkovskoye Hwy ena Park (phase I) 23 962 m² TTE 22 436 m² MFC Litha ase IP shevik (pha 17 700 m² Entuziastov Hwy 7 155 m RUDIELSFOR HINS «RTS» Zemlyanov Va 5 817 OKO (phase II) 26 750 m² utuzovskiy Hwy GB Ryazanskiy Hwy Volgogradskiy Hwy Stratos 30 000 m MFC Park Le 19 478 m 7 300 Amalteya 27 090 m² 10 400 Kashirskove Hw WH avoxsver MinskoyeH Class A Class B MKAD

* Office properties that received the delivery act in Q1 2018

Kiyevskoys

The building class is indicated according to the Moscow Research Forum Office Classification of 2013 Source: Knight Frank Research, 2018





Existing

Under construction

Key office projects delivered in Q1 2018* and due to be commissioned in 2018

Source: Knight Frank Research, 2018

- The Class A vacancy rate in the west of the Moscow Ring Road decreased by 10 p. p. against the end of 2017 till 7.4% or 17.3 thousand sq m owing to the transaction completed by the structures of the Moscow Region Government in Pallau-RB Business Centre.
- The major transaction in Demidov Business Centre resulted in the decline of Class A vacancy rate in the offices of the west of the Garden Ring by 7 p. p. against the end of 2017 till the level of 15.5% or 10.6 thousand sq m.

Most developers are still not ready for the new construction of large business centres with an area of 70–100 thousand sq m despite of the positive signals coming from the market about the growth recovery. Today, they prefer to develop second and even third phases of existing projects or diversify their risks through the construction of multifunctional centres, where the leasable office space does not exceed 30–50 thousand sq m.

Some developers choose an alternative strategy for the development of their assets by executing major capital works in their existing office buildings, sometimes even upgrading the class of the building. For example, the reconstruction of RTS Zemlyanoy Val was completed at the beginning of 2018 and the project was upgrated to Class B+. The developer Enka also plans to renovate in the Paveletskaya Plaza office complex in 2018, the entrance lobby, lift lobbies, engineering communications.

Demand

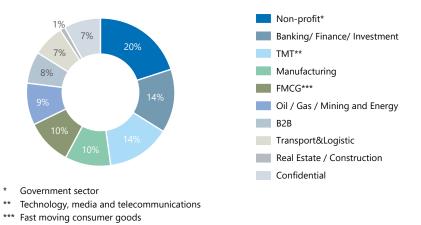
Q1 2018 supported the high take-up rate of office space in Moscow, which had begun in H2 2017. It ran up at 174 thousand sq m, which was 2.3 times higher over the same period in 2017.

The share of new lease transactions in the total volume of transactions was 66% according to the Q1 2018 results, which was 2 times higher than in Q1 2017.

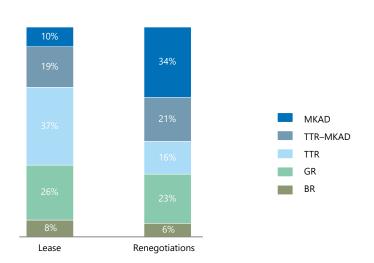
The companies partially owned by the state were still among the main tenants of quality office space like it was in 2017. In Q1 2018, its share in the total volume of lease and purchase transactions of office space was 20%. The companies of the banking and financial sector, technology/media/telecommunications sectors were still among the leaders with the share of 14% of the total volume of transactions.



Distribution of leased office space depending on the company profile



Source: Knight Frank Research, 2018



Source: Knight Frank Research, 2018

Distribution of transactions by type and location

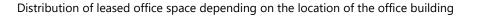
| lding | Class | Address | Transac- tion type | | |
|-------|-------|-----------------------------|-----------------------|--|--|
| | А | Rublevo-Uspenskoe Hwy, 1 km | Sale | | |
| | | | C 1 | | |

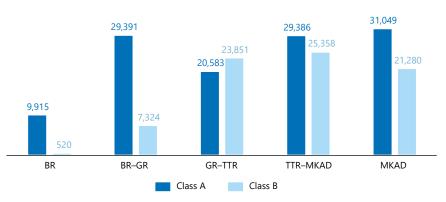
| Company | Area, sq m | Office building | Class | Address | Transac- tion type |
|---|------------|-------------------------|-------|---------------------------------|-----------------------|
| Structures of the Government of the Moscow Region | 29,900 | Pallau-RB | А | Rublevo-Uspenskoe Hwy, 1 km | Sale |
| Bank "ZENIT" | 12,817 | Lotos | А | Odesskaya St, 2 | Sale |
| Danone | 11,209 | Riga Land | B+ | Novorizhskoe Hwy, 9 km | Lease |
| X5 Retail Group | 9,701 | Oasis | А | Koroviy Val St, 5 | Lease |
| STNG* | 8,766 | Vereiskaya Plaza III | B+ | Vereiskaya St, 29 bld 134 | Lease |
| Bank "Russian capital" | 7,000 | Vozdvizhenka Centre | А | Vozdvizhenka St, 10 | Lease |
| FSUE "Russian Post"* | 6,785 | Parizhskaya Kommuna | B- | Kozhevnicheskaya St, 7 bld 1 | Lease |
| Sreda | 6,000 | Federation Tower (East) | В | Presnenskaya Emb, 12 | Lease |
| Mitsubishi Motors | 4,756 | Krugozor | B+ | Obrucheva St, 30/1 | Lease |
| Wildberries | 4,580 | Kulikovskiy | В | Leninskaya Sloboda St, 26 bld 3 | Lease |
| Mail.Ru* | 4,503 | Skylight | А | Leningradskiy Ave, 39 | Lease |
| Norilskiy Nickel* | 4,253 | Northern Tower | А | Testovskaya St, 10 | Lease |

*Knight Frank acted as a consultant of the transaction

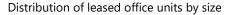
Key lease and purchase transactions closed in Q1 2018

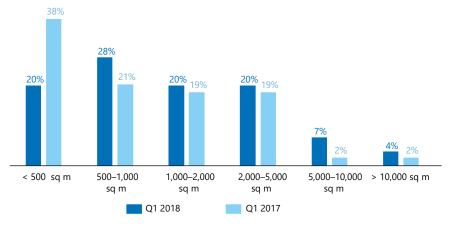
Source: Knight Frank Research, 2018





Source: Knight Frank Research, 2018





Q1 2018 was marked by an increase in the proportion of transactions for office space in business centres located in area of the Moscow Ring Road. About 50% of the total volume of transactions in this area was held by a transaction of the Moscow Region Government structures. However, it shall not be considered as a new trend.

The demand for office units with an area of more than 1 thousand sq m advanced in Q1 2018 compared to the same period in 2017. Therefore, the share of lease transactions for office units of this area was less than 50% a year earlier, today it has grown to 60%.

The growing demand for large office units can be even confirmed by the average size of the transaction, which continued to rise till 2,393 sq m in Q1 2018.

Source: Knight Frank Research, 2018

The office sales market

The sales volume of office premises had been growing over the past two years. The share of sales transactions increased at of 5 p. p. over the same period in 2017 and was 27% of the total volume of transactions by the results of Q1 2018. The amount of purchased office space came up to 52.8 thousand sq m, where 56% were held by a transaction of structures of the Moscow Region Government. The sales prices for quality office premises in Moscow listed in the market in Q1 2018 remained steady and did not change fundamentally from the level of 2017.

The average sales price for office units in Class A facilities was 246,277 RUB/sq m, in Class B offices – 150,079 RUB/sq m, in mansions – 220,171 RUB/sq m. The average price for flexible use premises at the first floors of residential complexes was 292,003 RUB/sq m.

The total supply of quality office space for sale in Moscow was 600 thousand sq m, where 51% corresponded to Class A offices according to the results of Q1 2018.

Moscow submarket data. Average sale price*

| | Class A, RUB/sq m | Class B, RUB/sq m | Mansion, RUB/sq m | Premises for free use, RUB/sq m |
|----------------------|----------------------|----------------------|----------------------|---------------------------------------|
| Boulevard Ring | - | - | 305 099 | 353 761 |
| Garden Ring | 278,570 | 207,887 | 337,686 | 357,852 |
| Third Transport Ring | 250,750 | 148,287 | 178,665 | 273,508 |
| TTR-MKAD | 225,206 | 154,677 | 89,907 | 151,076 |
| Out MKAD | - | 111,733 | - | - |
| Total | 246,277 | 150,079 | 220,171 | 292,003 |

* Excluding VAT (18%)

Source: Knight Frank Research, 2018





Commercial terms

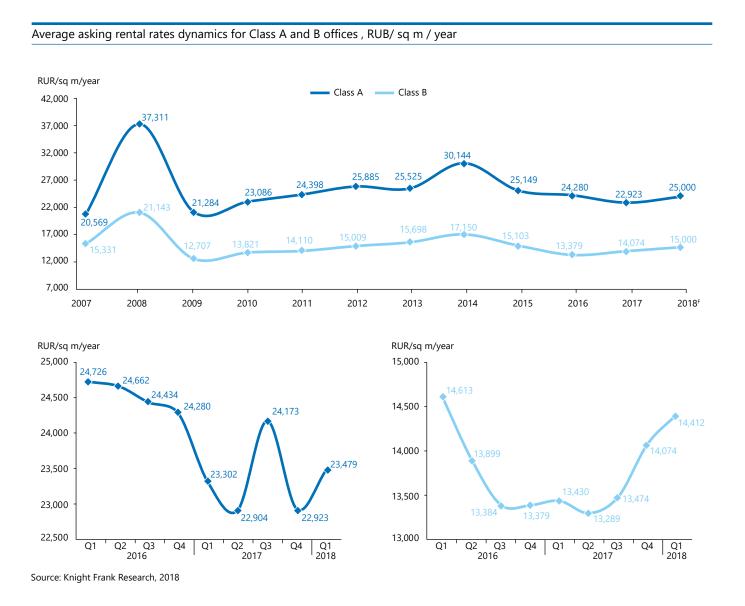
The asking Class A and B rental rates increased for 2.4%. However, the landlords of Class A premises were able to revise the rents upwards and change other lease terms due to the demand exceeding the supply and the reduction of vacant space, but the main fluctuations of the average rental rates for Class B offices were determined by the withdrawal of low-cost facilities from the market and the completion of major transactions. According to the Q1 2018 results, the average rental rate for Class A offices came up to 23,479 RUB/sq m/year, and for Class B offices - 14,412 RUB/sq m/year.

The most significant changes of the average rents occurred in Q1 2018 in the following business districts of Moscow:

- The average Class A rental rate within the Garden Ring area rose by 4% due to the increase in rates in such business centres as Hermitage Plaza, Citydel and Demidov.
- The rental growth in Class B business centres Light Tower and Integral located in Lefortovo business district led to the 8% increase of the average Class B rental rate.
- The average Class B rents went up by 7% in the south, between the Third Transport Ring and the Moscow Ring Road due to the withdrawal of the units in Nagatino i-Land from the market.

Other commercial terms of lease agreements are also changing along with the upsurge of rates in the most liquid office properties. The landlords are taking a tougher line when negotiating the lease terms: they are not ready to offer discounts from the asking rents, but are willing to consider the expansion of the rent-free period for 1-2 months. The practice when the landlord executed fit-out at its expense is also a thing of the past, forcing tenants to perform fit-out at their own expense.

Companies are still interested to conclude 5-year lease agreements. The indexation of rental rates in most agreements is linked to Russian Consumer Price Index, but it shall not be more than 5%.



Forecast

The minimum delivery volume of quality office space is forecasted at the level of 250 thousand sq m until the end of 2018.

There is still a possibility that timeto-market for new business centres announced for 2018-2019 will be delayed for a later period. Nevertheless, individual developers with projects located in highly liquid locations declare the construction recovery of previously frozen properties. In the future, we forecast an increase in the pace of new construction of quality office centres in Moscow, subject to stable demand.

The Class A and B vacancy rate in office centres will move on dropping following the steady take-up volume. As a result, rental rates are expected to grow. It is forecasted that the Class A vacancy rate will decline to 13%, and Class B - to 9% by the end of the year. The average rents will go up to 25,000 RUB/sq m/year in Class A offices, 15,000 RUB/sq m/year in Class B offices.

The net take-up volume of 2018 will remain at the level of 2017 reaching 600-700 thousand sq m.

| Submarket | | Lease | Class A | | | Class B | | | | |
|----------------------------|------------------------------|---------------------------|---------------------------------|--------|-----------------|---------|---------------------------------|--------|-----------------|------|
| | | Area, thousand. sqm | Average rent, RUR/sq m/year* | | Vacancy rate, % | | Average rent, RUR/sq m/year* | | Vacancy rate, % | |
| Boulevard Ring | Central business district | 712 | 38,284 | | 1 | 7.0 | 24,889 | | 7.4 | |
| Garden Ring | South | 985 | 26,119 | 27,977 | 8.0 | | 20,151 | 23,374 | 1.7 | |
| | West | 546 | 37,354 | | 23.1 | 10.7 | 26,049 | | 10.7 | 7.3 |
| | North | 660 | 27,587 | | 9.8 | | 21,197 | | 5.1 | 7.3 |
| | East | 407 | 25,000 | | 8.7 | | 17,637 | | 7.1 | |
| Third Transport Ring | South | 1,263 | - | 29,355 | - | | 13,955 | 18,035 | 8.5 | 7.8 |
| | West | 785 | 29,500 | | 11.4 | 13.0 | 16,811 | | 12.9 | |
| | North | 928 | 29,201 | | 12.1 | | 19,985 | | 5.2 | |
| | East | 1,121 | 20,924 | | 70.1 | | 15,544 | | 4.9 | |
| | MIBC Moscow-City | 1,153 | 30,015 | | 13.1 | | - | | - | |
| TTR-MKAD | North | 1,003 | 17,034 | 19,172 | 1.5 | 16.8 | 12,288 | 13,090 | 8.7 | 11.9 |
| | Northwest | 741 | 26,287 | | 11.0 | | 15,667 | | 22.3 | |
| | South | 1,997 | 21,344 | | 13.6 | | 12,927 | | 11.8 | |
| | West | 1,412 | - | | - | | 11,137 | | 10.5 | |
| | Southwest | 583 | 15,773 | | 16.0 | | 15,121 | | 16.6 | |
| | Preobrazhenskiy | 992 | 14,283 | | 60.4 | | 10,757 | | 7.2 | |
| Out MKAD | Khimki | 266 | 11,319 | 10,561 | 22.4 | 32.8 | 8,162 | | 26.7 | 23.4 |
| | West | 405 | 18,686 | | 8.0 | | 8,739 | 8,366 | 26.0 | |
| | New Moscow | 342 | 10,041 | | 42.8 | | 6,452 | | 9.3 | |
| Total | | 16,300 | 23,4 | 479 | 1 | 5.2 | 14, | 412 | 1(|).9 |

Moscow submarket data Key indicators*

* Excluding operational expenses, utility bills and VAT (18%)

Source: Knight Frank Research, 2018



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