Oil price volatility has grown considerably over recent years. The uncertainty makes it complicated for companies to establish long-term plans.

*Forecasted weighted average* oil price

- High volatility and controversial trends
  - The considerable reduction in oil prices and volatility in the oil market in 2014-2015 force analysts to review short-term oil price forecasts regularly.
  - As of the beginning of Q2 2016, most experts agree that oil price recovery is going to be slow.
Despite the downward trend in the commodity markets, Russian companies have set a drilling record

Average annual oil price and drilling meterage

Neutral to positive expectations of market participants

- 2015 saw a continued disruption in the correlation between oil prices and drilling meterage: despite the sharp decrease in oil prices, the meterage increased by over 10 percent.
- The increase in meterage may have been caused by market expectations. According to Deloitte’s 2016 Russian Oil and Gas Outlook Survey based on interviews with executives from Russian enterprises, 61 percent of experts expect a rise in oil prices in 2016.
- Despite the neutral to positive expectations, to relieve the impact of the current decline in oil prices, key market players aim to reduce operating costs and improve operating efficiency.

Capital investment plans for 2016, billion rubles

- According to the 2016 Russian Oil and Gas Outlook Survey, 55 percent of experts believe that capital flow into the Russian oil and gas sector will not decline for, at least, the next five years.
- The growth of uncertainty in the market has become one of the reasons why there is no trend towards changing the amount of capital investments in 2016 among the largest vertically integrated oil companies (VIOC). At the same time, the majority of market leaders are not planning to cut capital investments abruptly, which confirms the absence of extremely negative expectations.
- According to VIOC representatives, upstream will be the main focus for capital investments. Funds will be allocated towards maintaining and expanding exploration and production.

Source: Company data; the amount of investment includes foreign assets.
Uncertainty in the market puts pressure on exploratory drilling. At the same time, companies are increasing meterage in production drilling

**Production drilling, million m**

- In 2015, the total production drilling market grew by 12 percent.
- Most key players expanded drilling volumes having implemented their annual plans for production drilling.
- According to the representatives of most companies and actual Q1 data, companies are not planning to reduce the volumes of production drilling in 2016.
- Rosneft stands out among the key players as planning to boost the volumes of production drilling by no less than 30 percent.

**Exploration drilling, million m**

- In 2015, the exploratory drilling market volumes decreased by 10 percent, which was due to the uncertainty in the market and the suspension of participation in expensive exploration projects.
- At the same time, according to the results of Q1 2016, exploratory drilling grew by 1.8 percent as compared to the same period last year.
- Hence, in 2016 the reduction in exploratory drilling meterage may slow down, and, by the end of the year, meterage is predicted to be at the level of 2015.

Source: "Oil and Gas Vertical" magazine (CDU TEK), company data, *Deloitte forecasts*
Horizontal drilling remains a key driver for meterage growth in 2015, directional drilling is growing more slowly

- Directional drilling, million m
- Horizontal drilling, million m

<table>
<thead>
<tr>
<th>Year</th>
<th>Other</th>
<th>Bashneft</th>
<th>Russneft</th>
<th>Tatneft</th>
<th>Slavneft</th>
<th>Gazprom Neft</th>
<th>Lukoil</th>
<th>Surgutneftegaz</th>
<th>Rosneft</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1.5</td>
<td>2.4</td>
<td>4.6</td>
<td>4.4</td>
<td>2.7</td>
<td>16.6</td>
<td>1.3</td>
<td>3.8</td>
<td>1.9</td>
<td>14.0</td>
</tr>
<tr>
<td>2014</td>
<td>1.7</td>
<td>1.5</td>
<td>2.8</td>
<td>3.4</td>
<td>1.3</td>
<td>14.0</td>
<td>1.3</td>
<td>3.9</td>
<td>1.9</td>
<td>14.6</td>
</tr>
<tr>
<td>2015</td>
<td>1.9</td>
<td>1.7</td>
<td>3.9</td>
<td>4.5</td>
<td>1.7</td>
<td>14.6</td>
<td>1.7</td>
<td>4.5</td>
<td>2.2</td>
<td>16.4</td>
</tr>
</tbody>
</table>

Source: “Oil and Gas Vertical” magazine (CDU TEK)

- The 2015 market continued the trend observed in 2014: horizontal drilling meterage increased considerably as compared to the previous year - by 27 percent. It is horizontal drilling that currently drives the meterage growth in the Russian Federation. Most key players continued to increase meterage in horizontal drilling. According to the year’s results, meterage in horizontal drilling exceeded meterage in directional drilling at Gazprom Neft and Slavneft.
- Meterage in directional drilling grew by 4 percent in 2015, which was not as considerable as the growth in horizontal drilling meterage. The major boost in horizontal drilling volumes was due to increased drilling by Rosneft (by 32 percent) as well as by small and medium-sized oil companies. At the same time, Lukoil and Gazprom Neft have reduced directional drilling meterage considerably.
Western Siberia remains a leader in drilling volumes; however, the share of other regions has grown considerably over 2014-2015

Meterage distribution in production drilling

<table>
<thead>
<tr>
<th>Region</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Siberia</td>
<td>84.2%</td>
<td>79.1%</td>
<td>77.9%</td>
</tr>
<tr>
<td>Volga District</td>
<td>5.8%</td>
<td>12.2%</td>
<td>14.2%</td>
</tr>
<tr>
<td>Other regions</td>
<td>10.0%</td>
<td>10.0%</td>
<td>14.2%</td>
</tr>
</tbody>
</table>

Meterage distribution in exploratory drilling

<table>
<thead>
<tr>
<th>Region</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Siberia</td>
<td>65.5%</td>
<td>56.3%</td>
<td>52.2%</td>
</tr>
<tr>
<td>Volga District</td>
<td>24.5%</td>
<td>27.8%</td>
<td>30.4%</td>
</tr>
<tr>
<td>Other regions</td>
<td>10.0%</td>
<td>15.9%</td>
<td>17.4%</td>
</tr>
</tbody>
</table>

Source: “Oil and Gas Vertical” magazine (CDU TEK), Deloitte analysis

- Western Siberia is still Russia’s main oil region, accounting for 78 percent of meterage in production drilling and 52 percent in exploratory drilling in Russia. However, since 2013, the share of Western Siberia in the total meterage across the abovementioned regions has decreased by 6 and 13 percentage points, respectively.
- Stable and fast growth in drilling volumes has been continuously observed in Eastern Siberia: meterage for 2013-2015 is three times higher, and comprised 5 percent of production drilling and 13.5 percent of exploratory drilling in Russia in 2015.
- Drilling volumes in the Far East continue to change considerably year-on-year: while in 2015, the share of production drilling increased by 0.7 percentage points, a fall by 1.4 percentage points was observed in exploratory drilling.
Supply and demand in the drilling market have not seen significant changes; however, EDC’s share has been decreasing, and the number of medium and small suppliers is growing.

### Supply in the drilling market (based on meterage)

<table>
<thead>
<tr>
<th>Year</th>
<th>Other</th>
<th>KAToil-Drilling</th>
<th>Targin</th>
<th>Tagras</th>
<th>Eriell</th>
<th>RN-Drilling</th>
<th>Surgutneftegaz</th>
<th>EDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>28%</td>
<td>14%</td>
<td>21%</td>
<td>20%</td>
<td>28%</td>
<td>21%</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>33%</td>
<td>15%</td>
<td>21%</td>
<td>20%</td>
<td>14%</td>
<td>13%</td>
<td>21%</td>
<td></td>
</tr>
</tbody>
</table>

### Demand in the drilling market (based on meterage)

<table>
<thead>
<tr>
<th>Year</th>
<th>Other</th>
<th>Russneft</th>
<th>Bashneft</th>
<th>Tatneft</th>
<th>Slavneft</th>
<th>Lukoil</th>
<th>Gazprom Neft</th>
<th>Surgutneftegaz</th>
<th>Rosneft</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>8%</td>
<td>6%</td>
<td>14%</td>
<td>21%</td>
<td>21%</td>
<td>25%</td>
<td>6%</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>11%</td>
<td>6%</td>
<td>13%</td>
<td>13%</td>
<td>20%</td>
<td>20%</td>
<td>6%</td>
<td>11%</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Company data

Source: “Oil and Gas Vertical” magazine (CDU TEK)

### High demand concentration and considerable segmentation of suppliers

- The four largest Russian oil companies continue to account for most of the drilling demand in the market – more than 75%.
- EDC remains the only large independent supplier in the drilling market; however, its market share shrank considerably over 2015 - from 28 to 21 percent.
- Despite the market expectations, Rosneft has not demonstrated significant growth in the use of its own drilling capabilities.
The increase in the volumes of capital investment in the construction of production wells is due to the desire to sustain production levels at mature oil deposits.

Capital investment in the construction of production wells, billion rubles

<table>
<thead>
<tr>
<th>Region</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Far East</td>
<td>41.5</td>
<td>51.0</td>
<td>124.1</td>
</tr>
<tr>
<td>Caucasus and Southern Federal District</td>
<td>91.7</td>
<td>119.9</td>
<td>67.6</td>
</tr>
<tr>
<td>Timan-Pechora</td>
<td>344.3</td>
<td>370.4</td>
<td>435.3</td>
</tr>
<tr>
<td>Eastern Siberia</td>
<td>669.8</td>
<td>841.9</td>
<td>996.3</td>
</tr>
<tr>
<td>Volga District</td>
<td>70.6</td>
<td>124.1</td>
<td>166.6</td>
</tr>
<tr>
<td>Western Siberia</td>
<td>164.2</td>
<td>178.5</td>
<td>227.5</td>
</tr>
</tbody>
</table>

Source: “Oil and Gas Vertical” magazine (CDU TEK)

- Western Siberia accounted for the majority of capital investment in 2015. Capital investment in Russia’s main oil region increased by 17 percent as compared to 2014.
- Capital investment in Eastern Siberia has increased by 70 percent since 2013, which is due to increased production in the region.
- Most key players in the market have increased their capital investments as compared to 2014, which is due to the depletion of major highly productive “old” fields, the necessity of increasing their oil recovery and the equipment being worn out.
- Most companies claim that they are not planning to reduce capital investment in the construction of production wells in 2016.
Due to uncertainty in the market, companies are reducing capital investment in the construction of exploration wells

Capital investment in the construction of exploration wells, billion rubles

- Far East
- Caucasus and Southern Federal District
- Timan-Pechora
- Eastern Siberia
- Volga District
- Western Siberia

Source: "Oil and Gas Vertical" magazine (CDU TEK)

- Other
- Bashneft
- Russneft
- Tatneft
- Slavneft
- Gazprom Neft
- Lukoil
- Surgutneftegaz
- Rosneft

• As compared to the considerable increase in capital investment in the construction of exploration wells in 2014, 2015 saw a small fall.
• Capital investment increased by 16 percent in Eastern and Western Siberia but fell considerably in the Timan-Pechora region.
• Pressured by uncertainty in the market, key players have reduced their capital investment in the construction of exploration wells.
• Surgutneftegaz is one of the few companies in the market that has expanded capital investment, having increased it more than 1.5 times.
• Most companies claim not to be planning further reductions in capital investment in the construction of exploration wells in 2016.
The rise in expenses on well maintenance and workover is due to the desire to increase oil recovery at existing oil deposits

Well maintenance costs, billion rubles

-14%  
45.7  
8.2  
3.2  
7.7  
9.1  
12.2  
2014  

+11%  
39.4  
2.1  
3.8  
8.4  
8.5  
10.6  
2015  

43.9  
2016*  

-6%  
115.9  
17.5  
16.1  
28.8  
37.0  
2014  

+20%  
130.9  
109.1  
16.3  
30.8  
40.4  
2016*  

Workover costs, billion rubles

-11%  
3.2  
3.8  
8.4  
8.5  
10.6  
2014  

+11%  
4.5  
5.9  
11.3  
11.1  
21.6  
2015  

+20%  
5.5  
2016*  

Source: CDU TEK, * Deloitte predictions

• In 2015, the total well maintenance costs were reduced by 14 percent.
• Most key players except Surgutneftegaz reduced their investment in maintenance.
• Q1 2016 witnessed a 10 percent rise in well maintenance costs as compared to Q1 2015.
• Therefore, in 2016 the decrease in well maintenance costs will probably slow down and, by the end of the year, the total well maintenance costs may go back to the level of 2014.

• In 2015, the total amount of companies’ investment in workover decreased by over 6 percent.
• Small companies reduced their costs on workover by over 60 percent.
• Despite the decrease in total costs, almost all key players increased their investment in workover.
• Q1 2016 saw a significant growth in investment in workover both by large and small companies.
• Workover costs may rise by 20 percent in 2016 as compared to the previous year.
Western Siberia is losing its share in well maintenance and workover costs. In 2015, investment in maintenance in Volga District and Eastern Siberia grew considerably.

- In 2015, the distribution by region in the maintenance market changed considerably.
- Western Siberia, which was the leader in well maintenance costs (58 percent of the market in 2014), gave its place to Volga District and Eastern Siberia. Its share fell by 9 percentage points. The distribution of other regions by aggregate well maintenance costs changed insignificantly.
- The distribution of regions by costs on workover also underwent changes over the past year. Volga District’s share grew by 3 percentage points, the Far East - by more than five times, whereas Western Siberia’s share fell by over 6 percentage points.
- The shares of the Caucasus, Timan-Pechora and Eastern Siberia in the investment in workover increased insignificantly.
There was no significant M&A news in 2015; however, at the beginning of 2016, several transactions under preparation came to light

**Transactions in Russia and globally**

- **Schlumberger**
  - In April 2016, Schlumberger finalised a deal to acquire Cameron International Corporation.
  - The deal amounted to USD 14.8 billion.

- **Sinopec, Targin, Rosneft**
  - In February 2016, Sinopec, a Chinese petrochemical concern, announced its intentions to invest in the Russian oilfield services market.
  - Targin and Rosneft took part in negotiations on the possible creation of a joint oilfield service company on the Russian market.

- **Technip, FMC Technologies**
  - In May 2016, Technip, a French oilfield service company, and FMC Technologies, an American company producing equipment for underwater oil and gas development, announced a merger.
  - The joint company will be named TechnipFMC, its capitalisation will amount to USD 13 billion.
  - The deal is due to be finalised at the beginning of 2017.
  - Technip and FMC have a total staff of 49 thousand people working in 45 countries worldwide. The total income of the companies in 2015 was USD 20 billion.

- **Halliburton, Baker Hughes**
  - At the end of 2014, Halliburton agreed to acquire Baker Hughes for USD 34.6 billion (the price was eventually lowered to USD 28 billion due to the fall in oil prices).
  - On 6 April 2016, the US Department of Justice filed a lawsuit to freeze this transaction.
  - Problems in obtaining permission from the regulators and tension in the industry led to the cancellation of the deal, which was announced in May 2016.
  - Due to the termination of the merger agreement, Halliburton had to pay a termination fee to Baker Hughes of USD 3.5 billion.

**Market consolidation: failed expectations**

- One of the main expectations for 2015 was market consolidation through the withdrawal of small and medium players unable to withstand competition in the deteriorating market conditions or the anticipated reduction in market volumes, and through the acquisition of these companies by larger players in the Russian oilfield services market.
  - However, this expectation has not been vindicated: small and medium-sized companies hold a significant share of the market.
- In spite of news emerging on the market, there were no significant M&A deals in 2015 on the Russian or global oilfield services markets.
- The beginning of 2016 was marked by a number of announcements of transactions under preparation: however, as at the beginning of Q2, they are far from completion.
The largest global oilfield service companies are planning to reduce their headcounts in 2016 due to a noticeable fall in revenues in 2015.

Revenues and headcount of five largest oilfield service companies, 2013-2015

- The decrease in the volumes of work in the oilfield services market resulted in a decrease in revenues for service companies in 2015.
- The response was to reduce headcount: the top-5 oilfield service companies reduced their headcounts by an average of 15 percent year-on-year.
- However, the measures did not help to keep productivity at the previous level: in 2015, it was USD 333 thousand on average per person in the five largest companies, which is 16 percent lower than in 2014.
- The world’s largest oilfield service companies, Schlumberger and Halliburton, are planning to continue cutting costs in 2016, which may be evidence of the anticipated further decrease in volumes of work on the market and a fall in revenues of service companies.

Reducing headcount in Schlumberger and Halliburton

**Schlumberger**

- In 2016 Schlumberger announced its intention to lay off 10 thousand employees, which constitutes 11 percent of the current workforce.
- The company’s plans include adjusting the resource base and rationalising the asset base as activity levels in the oil and gas market are expected to fall.

**Halliburton**

- In February 2016, it became known that Halliburton would lay off 5 thousand workers, which is 8 percent of the current headcount.
- These redundancies are due to a fall in drilling operations and cost cutting.
Trends in the Russian oilfield services market

Positive trends
- Market stabilisation, “new reality” in the economy
- Growth in demand for local services
- Strong interest from Asian investors

Oilfield services market
- Key players continue to keep their market positions
- Changes in the distribution of regional demand
- Constant work to improve efficiency
- Increasing use of internal sources of funding

Customer pressure
- Requirements for continuous quality enhancement and cost optimization

Internal obstacles
- Lack of skilled labour
- Depreciation of production assets and fixed assets

Macroeconomic factors
- Unstable oil prices
- Retention of the sanctions regime
- Rise in (foreign) equipment cost
- Complexities in using and acquiring new technologies and knowledge
- Difficulties in raising external capital

Source: 2016 Oil and Gas Outlook Survey, company data, Deloitte analysis