Uncompleted construction work in the Russian Federation: causes and remedies

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Abstract. Uncompleted construction work is a major issue for the sector and the economy as a whole. According to Russia’s Accounts Chamber, the current average figure for state-funded projects in Russia in this respect is 30% (as much as 70% in some regions).

As a possible solution, this paper suggests using a system of surveys of participants in construction activity in order to have enough information for an analysis. In addition, the paper draws attention to the following important characteristic of construction – the critical importance of the planning stage. This is where a large number of regulatory instruments are used. There is a need to develop the nation’s corresponding regulatory framework at an advanced pace. Indeed, if construction work on a site cannot be completed and is discontinued, it may well cost as much to resume work on that site as it would to begin work on a new project. In-depth audits of the regulatory framework must begin with the planning stage. Any innovations in the regulation system must be assessed via two-way communication. The article was written on the basis of the RANEPA state assignment research program.

Keywords: government procurement, investment programs, uncompleted construction work, planning, funding

1 Introduction

The Russian construction sector is currently characterized by a large number of uncompleted projects, which suggests there are shortcomings in project management and a decline in the number of construction projects put into service. Above all, things at the moment do not look good at the level of the nation’s federal targeted programs [1], and there are issues in a few other areas where government funding is used [2]. While uncompleted construction work is not something new, it has become an issue of growing concern in recent times in light of the unprecedented sanctions pressure on Russia. If we look at it through the prism of the five theoretical functions of management (planning, organizing, commanding, coordinating, and controlling), it appears that the primary causes behind the increase in uncompleted construction work in Russia are associated with the

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investment planning stage. The tools employed by the government appear not to be enough to overcome that negative trend. There is a lack of upgrading, and there is a shortage of new ways to manage government investment in construction. Shortcomings arising at the planning stage lead to lower investment at the implementation stage. One runs out of funding sooner than all the work is completed. While this is not the only issue, it is a highly pressing one. There are also numerous cases where planned projects have been dropped due to an ineffective planning system – it being impossible to assess the future cost of a construction project on a government level early on [3, 4].

2 Methods

The term ‘uncompleted property’ may mean one of the following: a) a property construction work on which has been suspended due to lack of funding; b) a property construction work on which has been characterized by significant breaches of the time for completion. The issue of increase in uncompleted construction work is among the key issues inherent in public procurement in construction. Russian scholars and researchers are actively working on helping enhance existing mechanisms [1, 5, 6, 7], keeping in mind that the price to pay for poor public procurement is hundreds of millions of rubles in uncommitted, ineffectively spent, or even lost funding [8, 9]. As part of state procurement contracts, Russia’s constituent regions regularly engage in the construction of properties that have high socio-economic value. Analysis of the outcomes of such construction activity, which for the most part is planned as part of the Federal Targeted Investment Program (FAIP), and of the effectiveness of commitment of budgetary funding is performed by the Accounts Chamber of the Russian Federation. Table 1 displays the data on uncompleted construction work across the Russian Federation. The table displays only some of the regions, which is sufficient to give an idea and illustrate the scale of the problem. In 2022, investment in uncompleted construction projects in Russia accounted for 30.6%, an increase of 5.6% on the previous year [10]. The nation’s regions where the situation seems to be improving have exhibited only limited growth (the median value on declines in uncompleted construction work ≈ 1.2–1.4%).

According to Russia’s Federal State Statistics Service (Rosstat), the nation’s volume of construction works in 2021 was approximately 10.8 trillion rubles (an increase of 6% on the year 2020, in comparable prices) [11]. In the context of the Federal Targeted Investment Program (FAIP), in the period 2020–2022 the nation’s total planned investment via the FAIP was approximately 2 trillion 370 billion rubles (exclusive of state defense procurement contracts) – 739 billion in 2020, 746 billion in 2021, and 885 billion in 2022 [12]. However, the money provided appears to be insufficient to fund new capital construction projects that the key spending units propose to include in the targeted program if it is also to include in-progress and a large number of long-delayed construction projects. An issue of growing concern is the nation’s record low levels in terms of putting capital construction projects included in the FAIP into service [12]. A step taken by the government to help boost the effectiveness of its targeted programs was the adoption in 2023 of the integrated government program ‘Stroitel’stvo’ (Russian: ‘Construction’). It is a 5-year program (Figure 1).

The above program is characterized by a focus on substantially increasing the planning horizon. Previously, it was a 1-year program. The new program is aimed at achieving the following objectives:
1. reducing the time taken for decisions to be made in undertaking capital investments using funds from the federal budget and optimizing the procedures for making such decisions;
2. reducing the investment-construction cycle;
3. expanding the range of mechanisms for speeding up construction and putting capital construction projects into service ahead of time.

**Table 1.** Russia’s 2022 Volume of Uncompleted Construction Work (Paused and/or Put on Hold), Inclusive of Properties That Have Been Under Construction for Over 5 Years

<table>
<thead>
<tr>
<th>Constituent regions of the Russian Federation</th>
<th>Share of the total number of facilities As a %</th>
<th>Share of the total investment Relative to the previous year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average for all regions, including:</td>
<td>7.7%</td>
<td>30.6%</td>
</tr>
<tr>
<td>1 Komi Republic</td>
<td>16.3%</td>
<td>72.6%</td>
</tr>
<tr>
<td>2 Kirov Oblast</td>
<td>8.3%</td>
<td>67.5%</td>
</tr>
<tr>
<td>3 Amur Oblast</td>
<td>12.5%</td>
<td>66.4%</td>
</tr>
<tr>
<td>4 Samara Oblast</td>
<td>12.9%</td>
<td>63.2%</td>
</tr>
<tr>
<td>5 Omsk Oblast</td>
<td>10.3%</td>
<td>59.4%</td>
</tr>
<tr>
<td>6 Yamalo-Nenets Autonomous Okrug</td>
<td>16.8%</td>
<td>58.6%</td>
</tr>
<tr>
<td>7 Kaliningrad Oblast</td>
<td>8.0%</td>
<td>56.0%</td>
</tr>
<tr>
<td>8 Primorsky Krai</td>
<td>6.6%</td>
<td>55.9%</td>
</tr>
<tr>
<td>9 Republic of Crimea</td>
<td>11.3%</td>
<td>52.6%</td>
</tr>
<tr>
<td>10 Arkhangelsk Oblast</td>
<td>18.6%</td>
<td>51.9%</td>
</tr>
<tr>
<td>11 Khabarovsk Krai</td>
<td>8.4%</td>
<td>51.9%</td>
</tr>
<tr>
<td>12 Kabardino-Balkar Republic</td>
<td>4.9%</td>
<td>51.0%</td>
</tr>
<tr>
<td>13 Republic of Adygea</td>
<td>4.4%</td>
<td>49.6%</td>
</tr>
<tr>
<td>14 Kamchatka Krai</td>
<td>11.5%</td>
<td>46.8%</td>
</tr>
<tr>
<td>15 Chelyabinsk Oblast</td>
<td>10.1%</td>
<td>46.6%</td>
</tr>
<tr>
<td>16 Tyumen Oblast</td>
<td>5.7%</td>
<td>45.2%</td>
</tr>
<tr>
<td>17 Yaroslavl Oblast</td>
<td>5.4%</td>
<td>44.0%</td>
</tr>
<tr>
<td>18 Pskov Oblast</td>
<td>2.0%</td>
<td>38.6%</td>
</tr>
<tr>
<td>19 Tomsk Oblast</td>
<td>8.8%</td>
<td>38.1%</td>
</tr>
<tr>
<td>20 City of Saint Petersburg</td>
<td>5.2%</td>
<td>37.2%</td>
</tr>
</tbody>
</table>
Figure 1. Five-year integrated government program ‘Construction’

Thus, the program is intended to help boost the effectiveness of using budgetary funds allocated toward construction, speed up the process of putting projects into service, and, in general, ensure the achievement of the priority objectives set as part of the government’s construction policy (Decree, 2022) in the current climate of limited potential for strategic maneuvering. The program captures the following key challenges:

- there are rigid budgetary constraints;
- there is a need to ensure that the number of capital construction projects put into service increases at an advanced rate – the nation needs to achieve by 2027 an increase of at least 1.5 times on the previous year, 2022, in capital construction projects put into service;
- there is a need to reduce the nation’s construction backlog – the nation needs to achieve by 2027 a decrease of at least 2 times in the number of uncompleted capital construction projects included in the federal register for such projects.

Reducing the nation’s construction backlog is an imperative objective, as it is reflected in the volume of new units supplied to the market. There are a number of causes behind the formation of construction backlogs, and a thorough understanding of these causes is needed in order to improve the situation. Most of the key causes behind construction backlogs are of differentiated origins. The key reasons highlighted in the government document ‘Guidelines for the Key Spending Units With Regard to Conducting an Inventory of Uncompleted Properties and of Investments in Real Property Assets and for the Provision of Detailed Information About the Results of Such Inventories’ [13] are provided in Figure 2 below.

As evidenced in Figure 2, for the most part the problem lies with a lack of funding, poor design documentation preparation practices, and the poor professionalism of contractor organizations. The degree of influence of a specific factor could be determined using the following methods:

1. conducting surveys of contractor organizations that failed to complete the work in the timeframe required;
2. conducting surveys of public sector customers who had problems with putting properties into service on time;
3. grouping causes of suspended construction work by contracting parties, types of construction resources, losses, etc.
4. measuring the share of each factor in contributing to the overall figures on uncompleted construction work.

The use of these methods requires communicating with parties to government contracts, which could be accomplished via the state authorities concerned with coordinating the corresponding type of activity. Next, an in-depth, comprehensive analysis of information is needed. Currently, it is hard to draw meaningful conclusions due to a lack of accurate analytical information. For instance, the issue of insufficient funding can be decomposed into a multitude of sub-issues. This could be inaccurate cost estimate standards, miscalculations committed at the planning and budget obligation limit setting stages, and unrealistic initial maximum contract prices. Thus, the number of various factors associated with suspension of construction work is pretty large, and that makes it hard to draw meaningful conclusions and identify priority issues.

A possible solution that could help systematize analysis is to consider all factors at all stages of a project’s lifecycle. Of particular significance is the planning stage, as construction projects tend to take time to be completed, so it becomes increasingly less possible with each passing month to change something when it comes to resources, methods, and approaches.

Figure 2. Typical causes behind the suspension of construction work

3 Results
There is importance in analyzing relevant factors and working out proper solutions in an effort to enhance the instrumentarium for planning in construction. A characteristic of the construction industry is the existence of a vast base of regulatory documentation (e.g., rule books, technical regulations, and standards and rates), which has been developed and updated for dozens of years. Effective application thereof may be associated with (1) finding a precedent when a certain instrumentarium stops working and (2) developing new solutions adequate to the latest objectives. Hence, one may need to look for the causes of construction backlogs in Russia among the imperfections of its statutory regulation.

Let us take a look at the results that the use of the above approach could produce. For instance, when planning the cost of a future project in including it in the targeted program you may use unit rates from the nation’s compendiums of consolidated construction cost indexes. In essence, these compendiums are just based on data averaged from a large amount of information on implemented projects and, therefore, cannot give you anything specific. You cannot compare and choose between different options. You cannot estimate the cost for your project based on the materials and constructions you have. Enhancing the consolidated construction cost indexes system will enable construction project owners and contractor organizations to plan quickly, maneuver between different options, and determine future costs as accurately as possible. For instance, compendiums of consolidated construction cost indexes do not carry resource consumption rates. If this information were available, the compendium user would be able to form an independent judgment of the best way to put their own resources to use and accurately determine the cost through the lens of the objectives they are pursuing.

4 Discussion

The existence of a large number of spheres of technical and other regulation in Russian construction today is clearly making it hard to enhance relevant rules and regulations at an advanced pace. Commercial enterprises, and even associations and unions, do not seem to be in a position to propose any systemic large-scale projects on implementing new methodology. Therefore, the primary role here is certainly to be played by the government and sectoral authorities. With that said, commercial enterprises appear to play an important role in terms of two-way communication. Efforts such as setting up hypotheses, proposing solutions, analyzing effectiveness, and making adjustments are all part of significant joint work to be undertaken by the government and business.

5 Conclusion

The issue of construction backlogs in Russia seems to be quite difficult to resolve at this time. The factors leading to long-delayed construction work have not been analyzed as thoroughly as they should be. The accounting system used between the nation’s regional and federal authorities indicates that specialists do manage to get hold of some of the crucial information. It is, however, obvious that the existing potential for exploring the current situation has not been exploited to the fullest. Besides, this information does not actually serve as a basis for developing new regulatory documents and other instruments. If the Russian government is to do something about the nation’s construction backlogs, it may need to consider improving the situation at the planning stage (as a priority measure), including via the activities mentioned above.
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