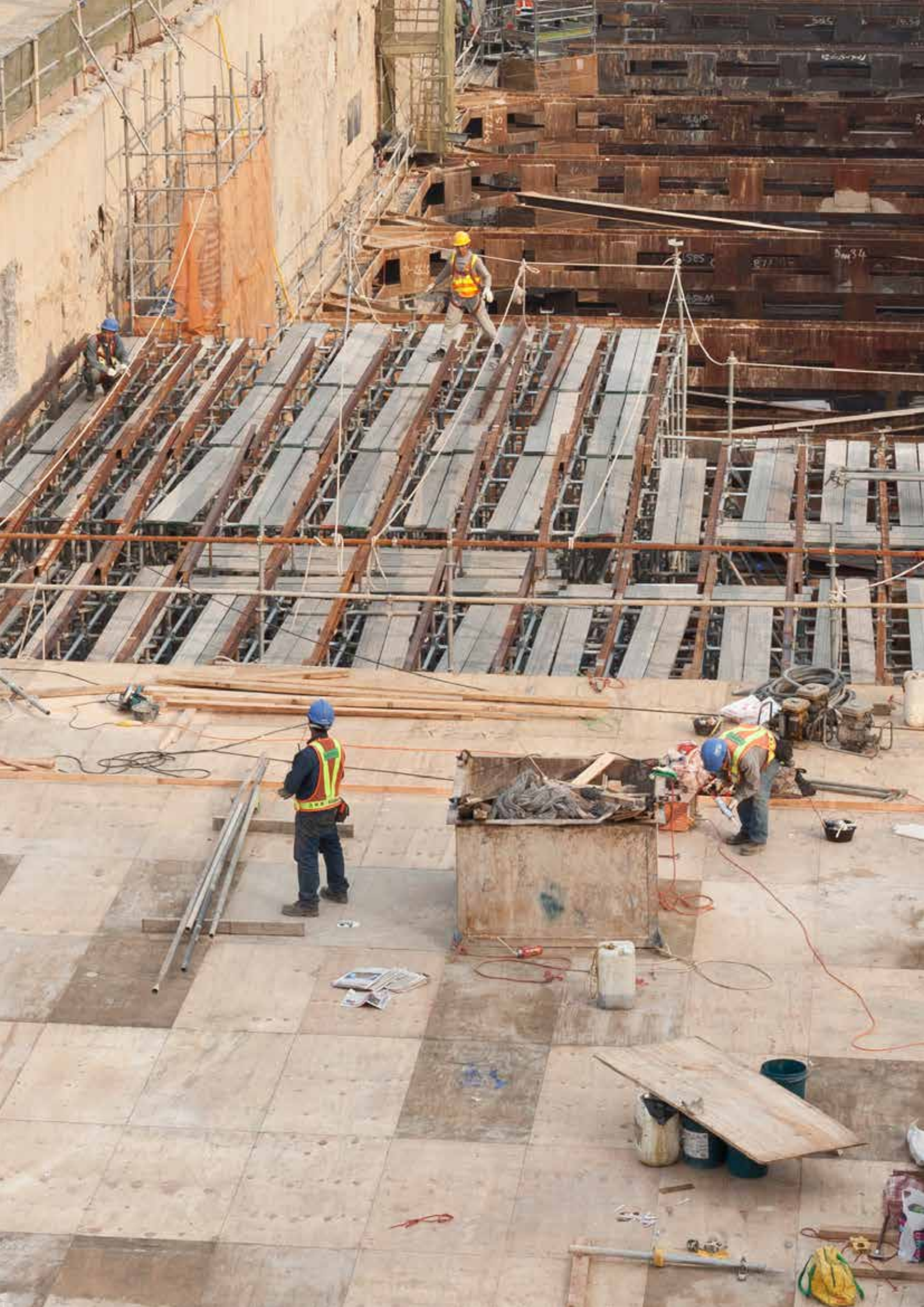


Delivering capital projects in CEE/CIS

2013 Capital Projects and Infrastructure Survey

June 2013







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Welcome

Capital projects are the economic lifeblood of the world today, especially in emerging markets such as Central and Eastern Europe (CEE) and the Commonwealth of Independent States (CIS). They've played a pivotal role in the area's advancement – powering economic diversification and infrastructure development and unlocking hydrocarbon wealth in the CIS. Our Russia-specific supplement shows that Russia epitomises all these trends.

Our survey – the first we've undertaken in the CEE/CIS region – aims to take the temperature of the capital projects business: to understand the challenges people are facing and what they intend to do about them, and to get their insights into the opportunities ahead.

We would like to thank all of those who participated in the survey and took the time to share their views. We hope you find the results interesting and useful.



Julian Smith
CEE/CIS Capital Projects & Infrastructure Leader



The highlights

By the numbers...

52%

of respondents experienced project cost overruns in the last 12 months

9 of 10

expect their projects to be funded, at least in part, by the private sector

78%

experienced project delays in the last 12 months

6 of 10

people responsible for capital projects expect an increase in expenditures in the next 12 months

Top improvement priorities:

- **For capital projects**—project scheduling, forecasting and costs accuracy
- **For existing operational assets**—development of an overall asset management framework and lifecycle plan

59%

of people responsible for capital projects expect an increase in expenditure on capital projects in the next 12 months

Market trends

Despite challenging economic conditions, respondents are positive about future capital spending. More than 80% are not expecting the current situation to worsen, with 27% of respondents saying their capital projects expenditure is expected to increase significantly in the next twelve months.

The situation appears to be similar across all industries with the most positive outlook coming from the energy, utilities and mining industries and the transportation and logistics sector. Respondents in both expect significant increases, reaching greater than 30%. Respondents from

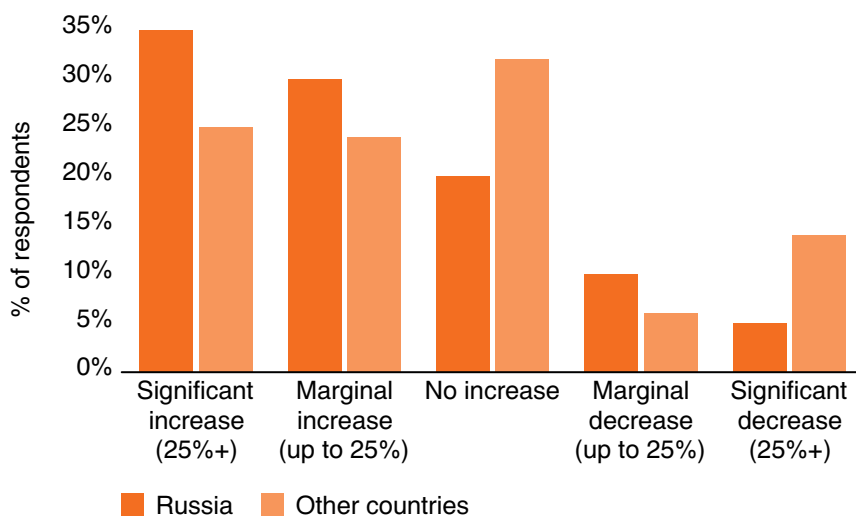
the real estate market also seem confident: a significant majority expects an increase in spending, indicating an upsurge in this sector, in contrast to the significant drop experienced in recent years.

Senior management, including CEOs and CFOs, is more optimistic compared to the average (51%), with almost 60% anticipating an increase.

Deeper analysis shows quite significant differences between the countries represented, with the most optimistic being respondents from Russia (despite the current slowdown) and Poland, where big infrastructure

projects are taking place. In both countries the expectation of an increase in capital projects expenditure reaches approximately 65%. Smaller countries in Central Europe, such as the Czech Republic and Hungary, are still experiencing the impacts of the economic crisis, and respondents voice lower expectations for near-term improvement.

Fig. 1: Expectations for capital projects expenditure in the next 12 months





52%

of respondents said that their projects ran over budget in the last 12 months

What issues are keeping project owners awake at night?

Despite initial feasibility studies and regular review, the number of respondents experiencing performance issues relating to their capital projects was high.

Risk management and governance (especially in Russia) are generally the two major internal challenges in capital projects. These two factors were also identified in our Middle East Capital Projects and Infrastructure survey carried out at the end of 2012.

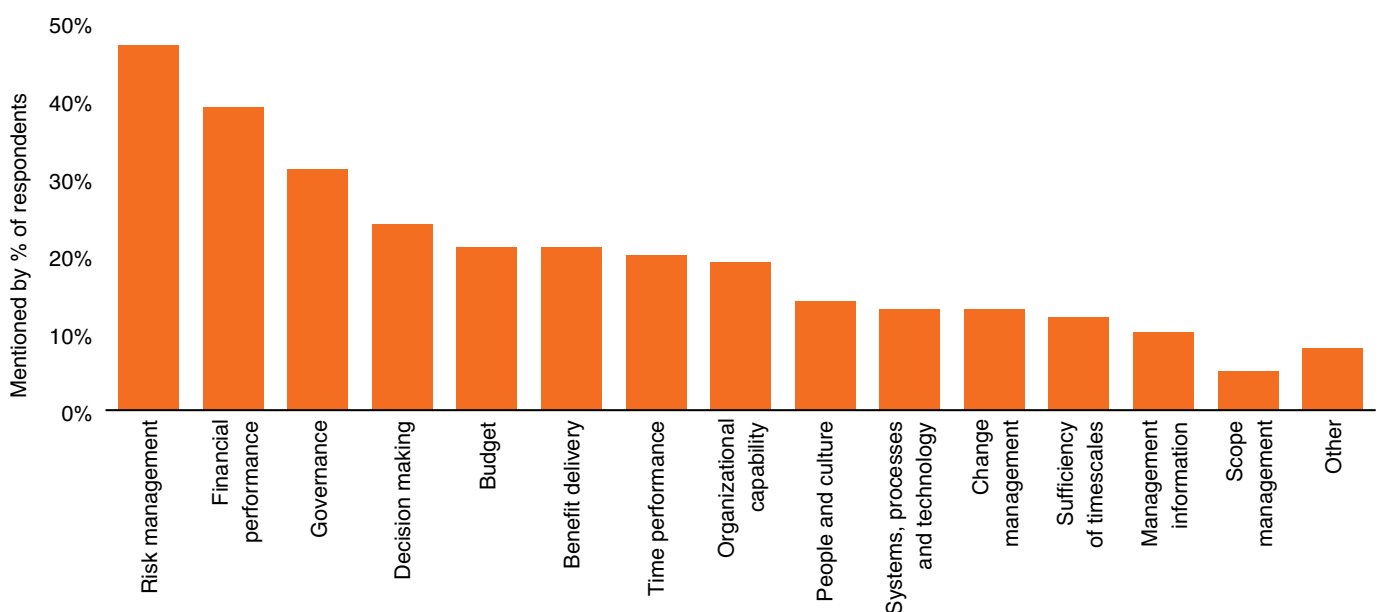
These challenges often impact project timing and cause delays. In fact, 78% of respondents have experienced delays in their projects in the last 12 months, which is almost the same compared to results of the Middle East survey.

Many capital projects are also facing poor financial performance and related cost overruns. Completing projects on budget was an issue for the 52% of respondents who said that their projects experienced cost overruns, with 23% saying that projects were over budget by more than 10%. This is however, a slightly better result compared to the results of the Middle East survey, where overruns were experienced by 64% of respondents.

A feasibility study is an analysis and evaluation of a proposed project to determine if it is technically feasible, is feasible within the estimated cost, and will be financially and/or

economically viable. Undertaking a feasibility study prior to executing capital projects is standard practice for almost all respondents, with 63% of respondents conducting the study internally. This is particularly important for investors and public authorities with little experience in capital projects, as it helps identify potential issues and complexities before they become problematic. But our survey shows that even when a feasibility study has been conducted, there remains a likelihood that something will go wrong with the project.

Fig. 2: Internal challenges experienced in relation to capital projects*



*Respondents could give multiple answers to survey questions when appropriate

Almost 4 of 5 respondents said that they experienced project delays in the last 12 months

4 of 5

Fig. 3: Experience of project delays in the last 12 months

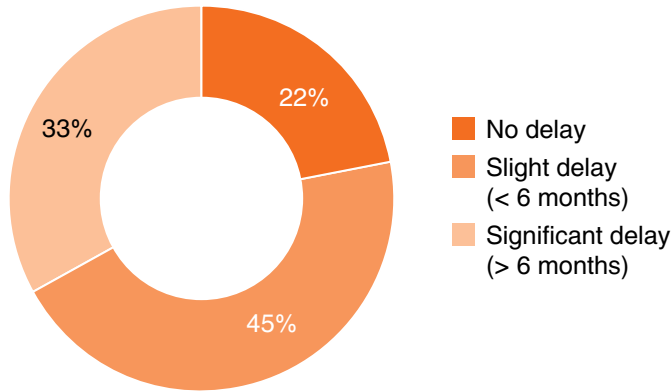


Fig. 4: Experience of cost overruns in the last 12 months

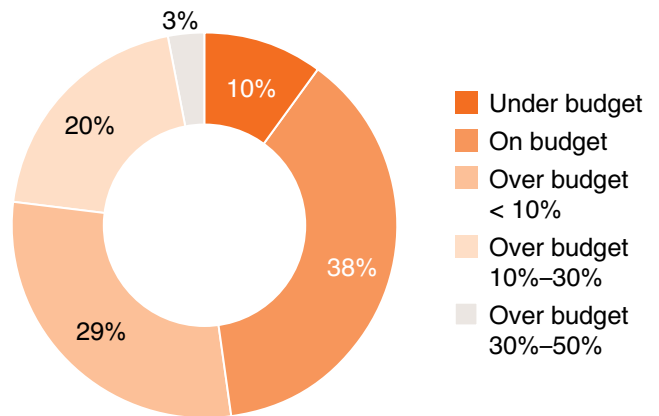


Fig. 5: Frequency that projects are subject to independent review

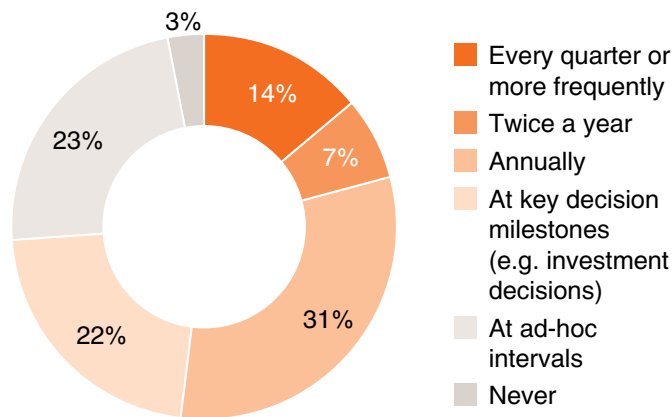
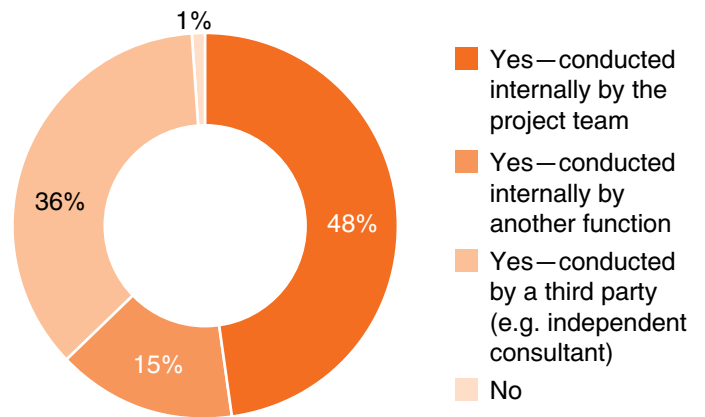


Fig. 6: Undertaking of a feasibility study prior to executing capital projects



“A feasibility study is an absolute must... Project terms are continuously changing and developing, without expert advice the authorities are very unlikely to do it right.”

– Tomas Janeba, President, Czech Infrastructure Association



Given these delays, respondents see the need for improved risk management and governance, for example utilizing proper status reporting. Similarly, to avoid overruns, the area of financial management has been identified as an improvement priority, namely project scheduling, forecasting and costs accuracy. Poor reporting methods may add to these issues (see box on page 9).

For already operational assets, the two dominant priorities are the development of an overall asset management framework and lifecycle plan.

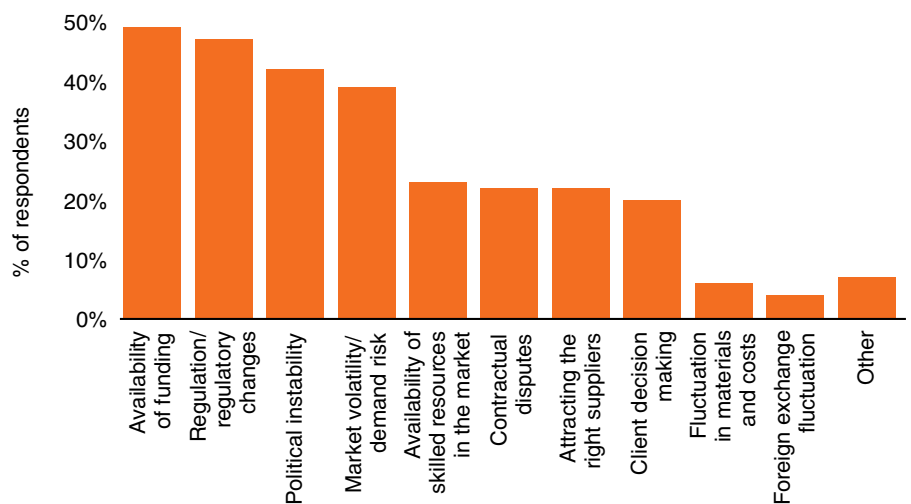
Securing financing is a major challenge, especially in countries where the availability of public funding is limited.

Regulatory issues are another major external challenge identified by capital project specialists, as political support for megaprojects* is essential. Unfortunately, capital projects

frequently suffer from uncertain or fluctuating political support which can be for many reasons, e.g. a national infrastructure strategy has not yet been enacted or permitting processes cause controversy.

*Please see a definition of a megaproject on page 10.

Fig. 7: External challenges in relation to capital projects*

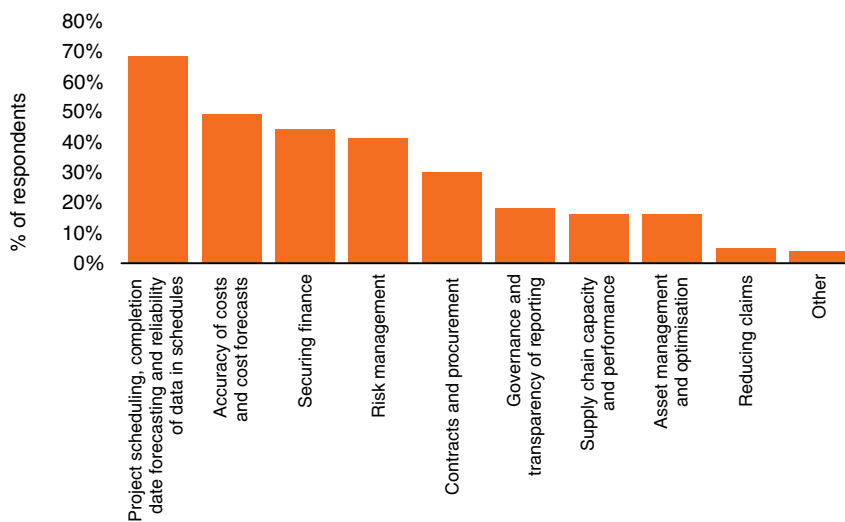


*Respondents could give multiple answers to survey questions when appropriate

What are the warning signs that project status reporting is not up to scratch?

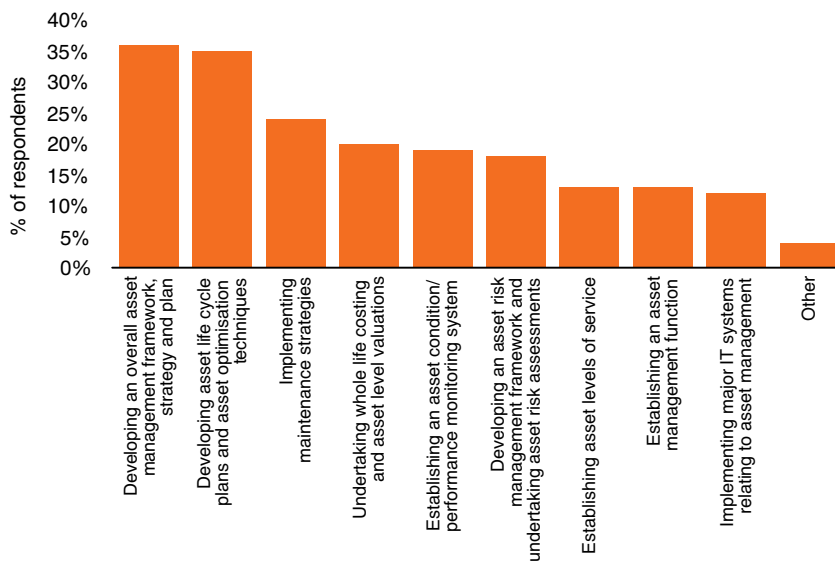
- It doesn't tell the reader the basics: When will my project be finished? How much will it cost? What should be at the top of my agenda?
- It is lengthy, difficult to understand and full of technical jargon.
- It is too optimistic and doesn't flag critical issues.
- It lacks objectivity and is not subject to "check and challenge".
- It takes a long time to prepare and conflicts with other information.

Fig. 8: Improvement priorities in relation to capital projects*



*Respondents could give multiple answers to survey questions when appropriate

Fig. 9: Priorities for current operational assets*



*Respondents could give multiple answers to survey questions when appropriate

Where do organizations see cross border opportunities?

We asked respondents to identify the countries that they intended to target in the next 12 months in relation to capital projects and infrastructure.

Excluding respondents' home territory, the respondents suggested that their primary targeted countries

are Russia, Turkey and Poland, suggesting that megaprojects* in these countries are driving strong interest and optimism.

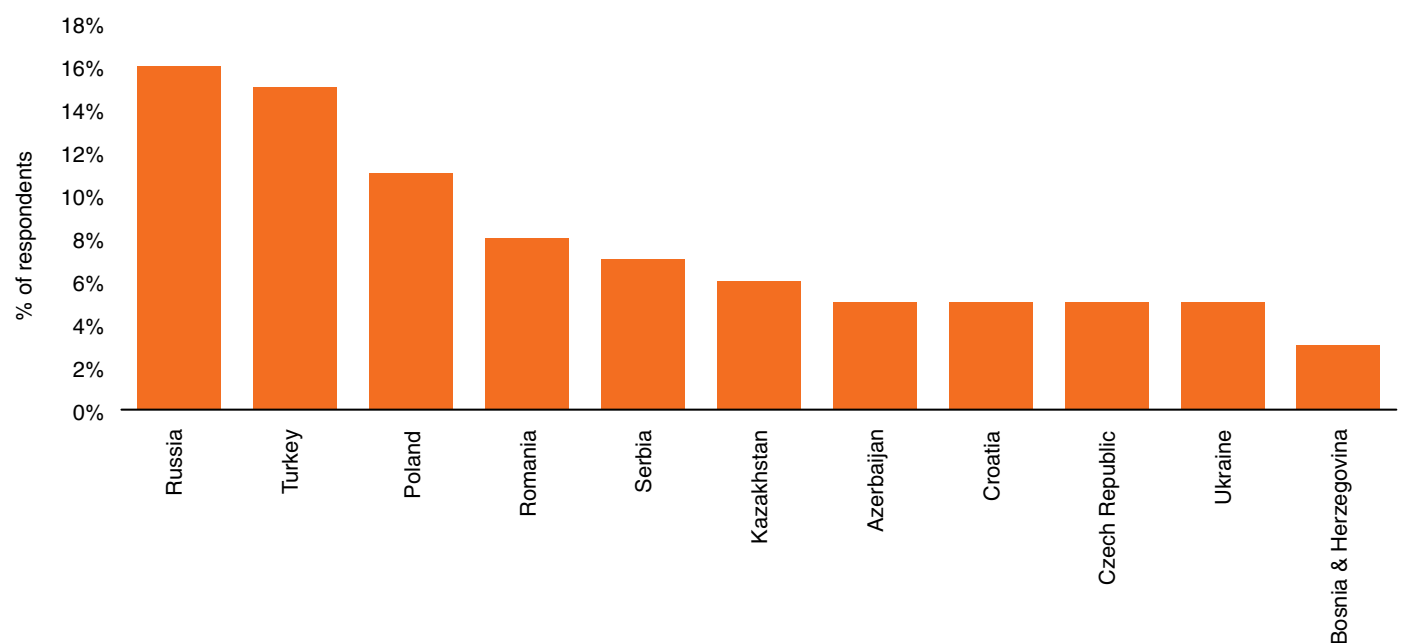
In Russia, the examples include Sochi Olympics infrastructure and high-speed rail from Moscow to St. Petersburg; In Turkey, the Akkuyu

Nuclear Power Plant project, gas pipeline projects and Istanbul third airport; in Poland, conventional energy projects such as the Opolé power project.

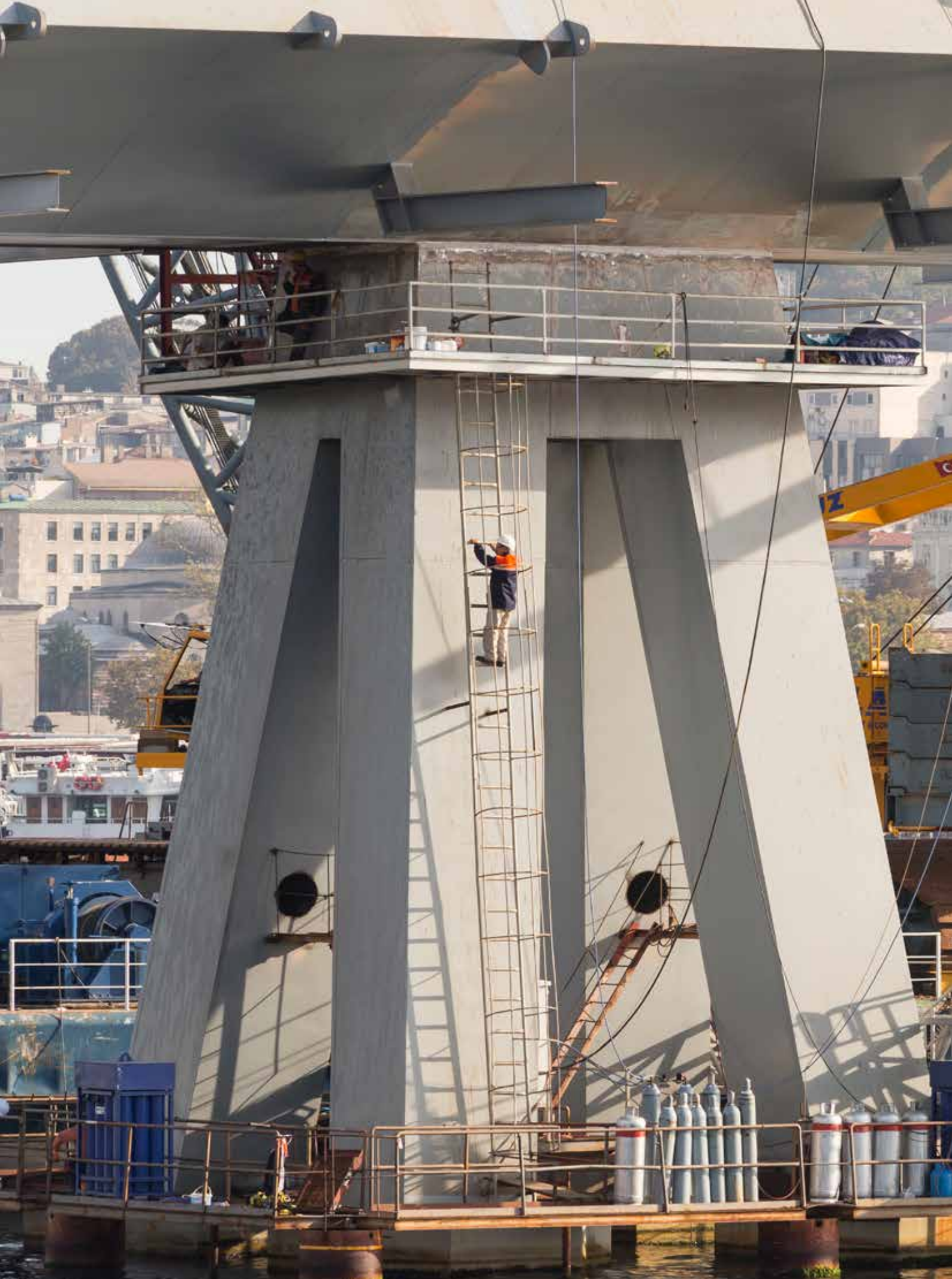
*"Major infrastructure projects that cost more than \$1 billion, or projects of a significant cost that attract a high level of public attention or political interest because of substantial direct and indirect impacts on the community, environment, and State budgets."

– Federal Highway Administration

Fig. 10: Geographic priorities in the next 12 months*



*Respondents could give multiple answers to survey questions when appropriate



61%

of respondents indicated that their projects were impacted by funding issues in the last 12 months

Spotlight on project financing

A scarcity of traditional funding (public funding and private finance) for capital projects and infrastructure projects appears to be driving interest in alternative sources of funding.

Over 61% of respondents experienced negative impacts from funding constraints, including 8% who cancelled projects outright. The effects can be clearly documented on larger public-private partnership (PPP) projects, which now need a greater number of participating banks

in the EU than they did prior to the economic crisis, as financial institutions now take much smaller stakes and are much more risk averse.

Project owners are looking to alternative sources to bridge the funding gap: over 90% of respondents expect their projects to be funded, at least in part, by the private sector. In Russia, the market for bank finance remains liquid and Russian respondents see private financing continuing to be very important,

nevertheless the share of purely private funded projects is significantly lower compared to other CEE/CIS countries. 72% of respondents see external private funding as being critical or of growing importance.

Most of the respondents who have experience with PPP projects believe they are beneficial. On the other hand, a significant number of people, within both the public and private sectors, believe that PPPs bring certain disadvantages to project delivery.

Fig. 11: Effect of funding constraints on respondents' projects

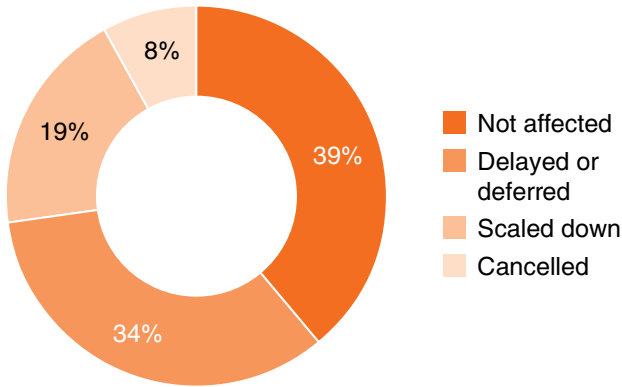


Fig. 12: Funding outlook for the next year

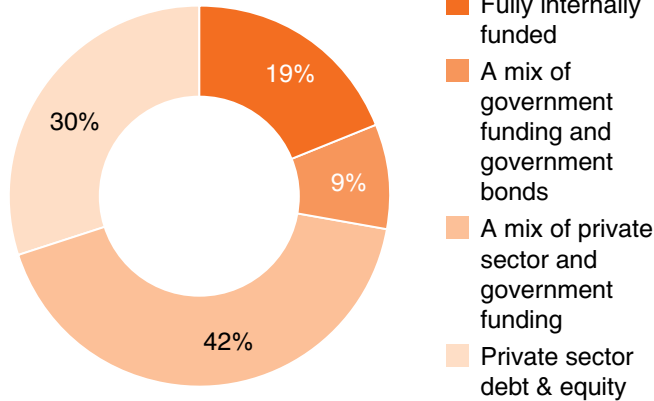


Fig. 13: Perceptions of the role of private finance in major project delivery

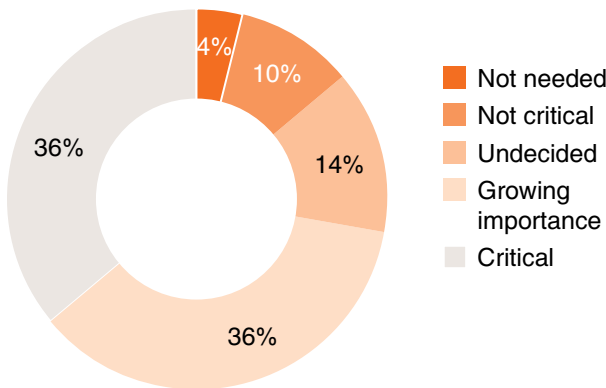
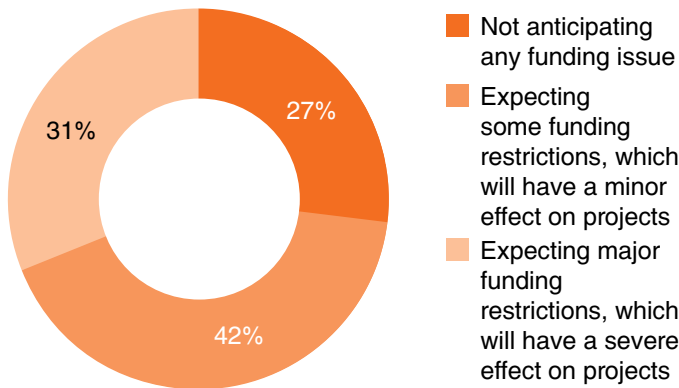


Fig. 14: Expectation of funding impacts for the next year



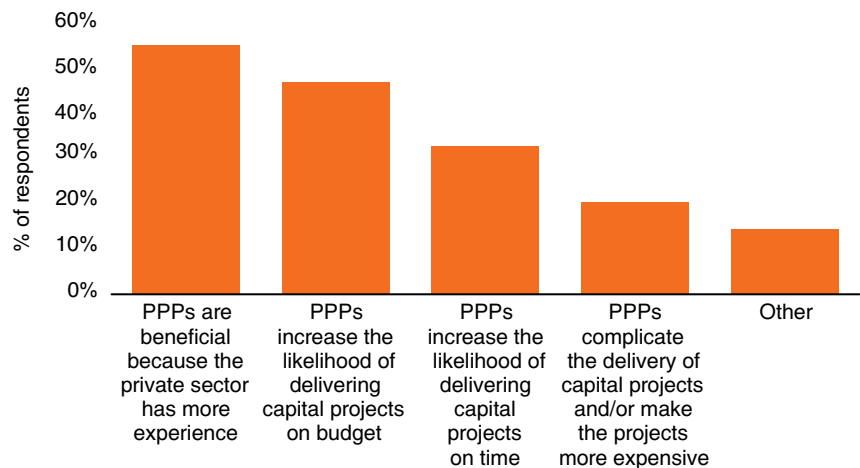
Almost 3 of 4 respondents said that they are expecting funding restrictions over the next 12 months

3 of 4

“Certain competencies and skills have direct influence on whether the PPP project is going to be successful. In St. Petersburg we have managed to grow a great team of professionals that successfully shares expertise across the regions of the Russian Federation.”

– Victor Afonin, Head of Agency of Strategic Investments, St. Petersburg government

Fig. 15: Experience with PPP projects*



*Respondents could give multiple answers to survey questions when appropriate

What’s happening in infrastructure finance?

Difficulties in the Eurozone financial markets have reduced the availability of traditional project finance funding sources and led many sponsors to explore alternative funding sources.

In CEE countries which are EU members or applicants, a large portion of infrastructure projects are financed (or co-financed) by EU funds, whereas countries in the rest of the region are mostly dependent on public budgets and development banks. EIB, EBRD and ADB are playing a vital role in infrastructure financing, especially in countries with low credit ratings and undeveloped banking and capital markets.

Pension funds and other institutional investors are scouting these markets for opportunities but to date have achieved only limited success; most have difficulty coping with the inherent regulatory and political risks.

“We require debt to build our projects although investor appetite is changing. Institutional investors prefer a lower financial risk with a lower commensurate return.”

– Partner, Leading renewable energy investor in CEE

“The importance of external private financing for infrastructure investment projects is crucial. Taking into consideration the huge need for infrastructure works, it is essential to succeed in attracting private capital for such works.”

– Senior Management, Romanian government

“Participation of the private sector in financing infrastructure projects not only reduces the burden on the budget, but also improves the efficiency of public investment, increases the transparency of the project, allows better control of costs and risks.”

– Senior Management, Russian transport operator

Survey methodology

The 2013 CEE/CIS Capital Projects and Infrastructure survey was completed by 105 respondents from a broad range of industry sectors, all with a key role in the delivery of major projects.

We asked the respondents their views on the challenges they faced in the last 12 months and their outlook for the next 12 months.

In addition to conducting an online survey, we also held in-depth interviews with several specialists in capital projects from both the private and public sectors.

We conducted the survey in April and May of 2013.



Fig. 16: Participating industry groups

	Number of respondents*
Energy, utilities and mining	46
Engineering and construction	23
Transportation and logistics	23
Government/state-owned enterprises	11
Real estate	8
Aerospace and defense	3
Professional services	3
Hospitality, leisure and media	2
Other	18

Fig. 17: Regions in which respondents operate

	Number of respondents*
Central and Eastern Europe	70
Russia/CIS	36
Western Europe	10
Middle East	5
Asia	4
Africa	3
South America	2
Globally	8

Fig. 18: Function of participating organizations

	Number of respondents*
Owner/sponsor	73
Main contractor	20
Subcontractor	12
Financier	12
Project management consultant	10
Procurer	8
Technical consultant	7
Regulator	3
Other	10

Fig. 19: Roles of participants

	% of respondents
Executive management	39%
Finance	31%
Project delivery	11%
Advisory/consultancy	3%
Operations and production	2%
Internal audit	2%
Risk management	2%
Procurement	2%
Legal	1%
Other	7%

Fig. 20: Ownership structure of participating organizations

	% of respondents
Private	42%
Listed on a stock exchange	26%
Government/state-owned enterprises	24%
Other	8%

Fig. 21: Number of active capital projects of respondents in the past 12 months

	% of respondents
Between 1 and 2	30%
Between 3 and 5	30%
More than 20	14%
Between 6 and 10	11%
Between 11 and 20	9%
None	6%

*Respondents could give multiple answers to survey questions when appropriate

About the PwC Capital Projects and Infrastructure team

Our team of capital projects and infrastructure experts in the CEE/CIS region, helps project owners and stakeholders resolve complex issues across all stages of the project lifecycle.

We combine real industry expertise with project delivery experience and deep subject matter knowledge and offer global knowledge with local presence.



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