

# Analysis of the report

## „Road building in Poland” GDDKiA-PwC

### False picture or real

PwC has released the report on road construction in Poland, commissioned by GDDKiA (Polish National Road Authority) It has been constructed on the basis of 7 questions (dilemmas) to which 21 answers are brought forward. Reading 'dilemmas' and also thesis arising from the 'analysis' of these dilemmas we have to conclude that educational and scientific value this report is negligible.

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# Analysis of the report „Road building in Poland” GDDKiA-PwC

False picture or real?

## Foreword

The question put forward by the authors: *How can Poland's road infrastructure be developed using EU funds while at the same time supporting economic growth?* seems to be good, but the answers are trivial. The question tends to ask, how to invest in road construction and support the development of the country (overall). Rightly suggests that the construction of roads is not the goal itself. Roads are used for some purpose and do not constitute the final effect of development.

How to do that wisely? That is the question. The answers in the report do not show any conduct of analysis of this important matter. The spectrum of responses should address such issues as:

- Impact of projects on the local and supra-local community and economy;
- Innovation, technical capacity building , development of creative possibilities , the development of the participants on the construction market in Poland
- Appropriate allocation of projects , or making expenditures where they are most needed , e.g. for the development of industry, trade, tourism
- solicitude to the condition of the market participants, the possibility of economic development
- solicitude to the effectiveness of solutions, their
- durability and quality, environmental impact, defense issues
- The content and size of the projects assigned to each task
- Resources allocated for the implementation of the projects, the current and future needs, etc.

Meanwhile answers simply show, that through the liberalization of conditions for participation in the tendering procedure, we have less expensive roads (than before), which seems to exhaust the issue of economic development. Development is achieved, therefore, by the fact that it's cheap.

## New perspective – experience of the past

During recent weeks and months, there are more and more information about changes in administration attitude towards new projects within framework of 2014-2020 EU financial perspective. Part of the concept is a step in the right direction. If these steps would be undertaken before current financial perspective, which is now ending, we would avoid the current crisis of the construction industry. The scale and nature of proposed changes show which elements of the investment system still remain faulty.

Even if the 'facts and myths' were true, it has to be emphasized that the wrong piece of reality was analysed. The report from the start assumes that this is the right piece to provide sufficient, competent and comprehensive answer. Whoever prepares the samples for the study, has a great impact on the results. We cannot agree with this approach.

The fact that 9 out of 10 parameters is fine, does not mean that the tenth parameter would not disqualify the test. In this case, the study omitted several other facts and myths. What was the key for decision, which facts and myths are worthy to be included in the report?

The second fundamental objection concerns the methodology of the report itself. It was composed on the basis of other reports and materials of GDDKiA. It is not known what authors of previous studies compared. That begs the question of what kind of the road construction cost in Poland we are talking about. We confuse some basic definitions or references.

Is it the value of the contracts concluded between the general contractor and GDDKiA, or maybe the total costs that were incurred for the construction (including those covered by the money of construction companies' shareholders, pension funds, and social costs)? Are we talking about the cost together with the land acquisition or not? Are we talking about the cost of construction within taking-over period or including the cost during the warranty period? Do we include the cost of maintenance during the warranty period? Are we talking about the life cycle costs of facilities? Is it possible to compare the standards of what we call the highway, even though for example in Poland we leave provision for a third runway in the road axis (which has an impact on the cost of drainage, earthworks, land acquisition, facilities over the highway, etc.) .

How then, the basis for comparison was established and a sample was selected? Reading the report one may have the impression that none important assumptions were made in this regard, we can learn from the text that construction cost is a complex matter and depends on many factors. Therefore the Report provides no contribution to the discussion about the real costs of road construction.

The third fundamental objection concerns the presentation of the results of comparison. In the section on myth (1), the report states that:

At the same time, in 2012 GDDKiA saved PLN 2.4bn on roads [author's underscore] commissioned for use in 2012, which were built at a cost lower than that specified in the investor's cost estimate. Examples of such roads include:

- A2 - Mińsk Mazowiecki ring road - completed at 65.1% of the expected cost level;
- A2 - section D - completed at 64.1% of the expected cost level;
- S8 Wrocław - completed at 50% of the expected cost level.

All these projects were completed within the contractual deadlines. [author's underscore].

How then, the 'expected level of cost of Minsk Mazowiecki bypass' was therefore determined? How “the contractual time for completion” was determined?

The relationship between achieving assumed time for completion and its proper determination is really interesting. Moreover, it would be interesting if the report could recall circumstances of cost estimation preparation. It was not mentioned who makes them (designers) and who verifies them (what is commonly known – no one). Achieving of 'savings'

is not the result of extraordinary efforts of contractor or project leadership, but most likely the fact that the designer estimated these costs in such manner, and no one really verified that. Then the situation changed, prices dropped and still no one has verified these estimates. The report does not put forward the issues of the budgetary process or setting deadlines. GDDKiA raises more than once that there are investments performed by the so-called 'reliable contractors' taken over before the deadline, but that may attest to the fact that the time for completion was just long. As a standard, the employer assumes two or three construction seasons to build the road. This report does not examine this issue, but goes straight to the suggestion that GDDKiA managed to save some funds, although it is rather appropriate to ask whether the cost estimation was drawn up correctly.

This should be part of every professionally prepared study and the key interest of the report, since first the prices were routinely higher than the budget, and now they are always lower. Why the competence of conducting the cost estimations was not rated?

To sum up, reading the first 'dilemma' and consecutive 'analysis' of this dilemma, leads to the conclusion that educational and scientific value of the Report is negligible.

It also has to be noted that authors of the Report failed to utilize the vast achievements of research institutions that controlled the process of creation of infrastructure in Poland. Supreme Chamber of Control in the previous period compiled and published more than 120 reports concerning the investigated issues.

Finally, it is mind boggling, why authors did not make any reference to the interesting and profound "Report on the situation in the road construction industry in 2012", prepared under the direction of the current Minister of Economy, Deputy Prime Minister Janusz Piechociński in which many of the major problems were correctly diagnosed and the necessary directions of change were identified.

We strongly encourage to examine our detailed observations and comments concerning the analysed report.

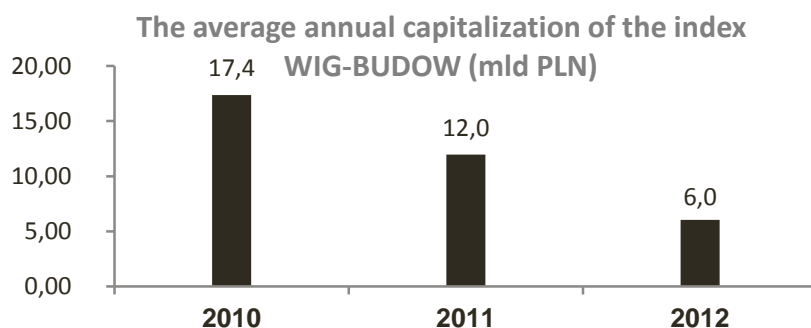
## Rapport PwC: Dilemma 1: How can Poland's road infrastructure be developed using EU funds while at the same time supporting economic growth?

In 2007, the key task facing GDDKiA was not only building a defined number of kilometres of road, but above all effectively expending the EU funds allocated for this purpose. This was a difficult task to accomplish in an undeveloped and inexperienced market and required GDDKiA to decentralize and establish appropriate departments as a consequence of which, it was possible to fulfil the said task, thus creating a competitive market in which Polish construction companies could develop and which can now compete in both the local market as well as others.

Engineers and contractors do not understand how the public investor can treat as dilemma the simultaneous infrastructure development and support the economic development of the country. It seems obvious that these processes are mutually stimulating and there is no dilemma regardless of the source of funds for investment. The condition here is the existence of a sustainable business environment and implementation solutions adopted in developed countries.

The statement that „it was possible to fulfil the said task” is an abuse. The programs of road construction have not been completed and have not developed Polish companies, and cited "competitive market" has generated a number of pathologies in the construction sector (payment delays, denial of payments, predatory pricing, illegal employment, etc.). Obvious illustration of the "development" of the Polish construction market are spectacular bankruptcies of companies with Polish capital. The finding that by participating in the construction of roads contracts, these companies have evolved to such an extent that now they can compete not only on the Polish market but also abroad resembles a grim joke.

Below we present the data on bankruptcies and capitalization changes



## PwC Report: Dilemma 1: - facts and myths

Myth (1): It is a myth that the roads in Poland are the most expensive in Europe.

In Europe, the average cost of construction of 1 km of road is EUR 9.4m.

In Poland, the cost of building 1 km of motorway is close to this average. After the fall in prices since 2008, it is now EUR 9.61m.

Fact (2): It is a fact that in the years 2007-2013 the terms and conditions for participating in tender procedures were liberalized, the market opened up, and competition increased.

The average number of bids submitted in GDDKiA tenders increased more by than twofold in the period **from 2007 to 2012.**

Re. Myth 1. The real myth is that the comparison of average cost of road construction (using a price index for 1km of highway) gives any useful knowledge.

It is a fact however, that the optimization of construction design instead of the Byzantine style of construction would bring savings of 1.5 million euros per 1 km and allowed for example to complete the A2 highway to the eastern border.

Re. Fact (2) suggests that the action undertaken by GDDKiA brought positive effect, although the report did not make any analysis of the impact of growth in the number of contractors on the quality, timeliness and condition of the entire construction industry.

## PwC Report: Dilemma 2: How can the investment process be prepared to make project execution effective?

The errors made at the preparatory stage of an investment project affect the costs at the execution stage. Therefore, both GDDKiA and contractors endeavour to avoid them. Solutions are being sought to make it possible to optimize projects, while at the same time ensuring they are of top quality.

For an informed public investor this shall not constitute a dilemma, but should be his duty. The fact that the preparation stage of investment is crucial for the execution within the envisaged costs and time is known for GDDKiA only theoretically. In actions of this agency, the will to avoid mistakes at the preparation stage of the investment cannot be noticed. The quality of programming documents and project documentation is steadily declining since 2007. The report acknowledges that "Solutions are being sought to make it possible to optimize projects" which confirms that:

- The quality of the design documentation currently being prepared and those already in possession of GDDKiA is low or very low;

- report fraudulently suggests that the solution for the problem can be "optimization" of the design performed by the contractor - a method not used systematically anywhere in the world.

## PwC Report: Dilemma 2 – facts and myths

Fact (3): It is a fact that the quality of the geological work has an effect on the execution of investment projects. Therefore, a solution must be found that would enable the designer's fee to be calculated based on the work actually performed rather than on a lump-sum basis. In 2014, new standard contracts for design work will come into effect, under which the designer's fee will be calculated based on the work actually performed. Amendments to one of the contracts, resulting from errors in the hydrogeological documentation, cost over PLN 8m.

Fact (4): It is a fact that until now Poland has had no standard technical specifications relating to the performance and acceptance of construction work. 200 industry representatives, in cooperation with GDDKiA, are involved in drawing up standard technical specifications. Roads will be built under the new financial perspective based on these specifications.

Fact (5): It is a fact that GDDKiA is open to suggestions aimed at optimizing the investment process. Therefore, it has introduced the "design and build" and "optimize and build" formulas. 10% of the contracts concluded so far provide for the execution of projects using the "design and build" or "optimize and build" formula. Under the new financial perspective, approx. 50% of projects will be executed using these formulas.

Re. Fact (3). Noticing these obvious connections should focus attention of GDDKiA already in 2007. The report (deliberately or not) ignore the fact that the soil survey, is part of the design process. GDDKiA generally chooses offers for the design with underestimated prices allowing fair geological survey or a map for design purposes and these decisions are made knowingly. Nevertheless, the impact of the quality of the geological survey is crucial for the construction cost growth, and time for completion, but not the only. The report confirms that the current quality of these studies is low. Incorrectly identified the cause for low-quality of geological survey (part of design, not a separate order) leads to doubt about the beneficial effects of the recommendations. The proposed solution will improve (if at all) only one part of the whole process, which requires fundamental changes as such.

Re. Fact (4) – The fact is not true. There are documents considered as standards and they rise protests by contractors at every tender published. Each designer is obliged to use them when working on the design and technical specification (so called STWiORB and PFU - *technical specification for execution and taking-over of works, Functional usage program*). The report did not mention, how the identified



lack contributed to problems during the works for the past seven years - certainly was not negligible.

Re. Fact (5) in the opinion of industry organizations is a myth. The real motivation of GDDKiA to the use the “design and build” scheme and "optimize and build" stems from a desire to avoid responsibility for the problems occurring during the design process, which report recognised as Fact (3). The purpose is to transfer the responsibility for the design process on the contractor. (in the classic model, responsibility lies within investors' obligations). A striking example of avoiding liability for designs already owned and paid by GDDKiA is the formula of "optimize and build", which as a rule is not used in the world, because it is a hybrid of two completely different implementation philosophies. The report completely ignores the obvious issues that the implementation of the investment in these schemes, in principle, it is not effective for linear investments and that the overall cost of such implementation is greater than the classical method.

### PwC Report: DILEMMA 3: How can the best contractor be selected who will complete the investment project in a timely manner, while ensuring the best results?

The success of an investment project, understood as its timely completion, within the budget and in line with the assumptions, is largely dependent on the entity carrying out the investment which is why it is very important to select contractors that have an appropriate standing, thus making it possible to implement road projects which are of key importance to Poland. GDDKiA strives to ensure that the process of selecting contractors is developed and conducted in an appropriate manner, that it is unbiased and ensures competitiveness. The principles behind this process are largely governed by the legal regulations.

The real dilemma is to choose the cheapest contractor who will implement the investment in time, ensuring the highest quality of results. The best contractor who is able to ensure that (i.e. would take into account all the risks of implementation) in the bidding process usually ranks in the middle of the companies participating in the tender. This dilemma is not possible to be resolved taking into account the current range of risks imposed on the contractors..



## PwC Report: Dilemma 3 – facts and myths

Myth (6): It is a myth that using price as the sole criterion for selecting bids makes it impossible to effectively execute an investment project. In the years 2007-2012, 74% of investment projects were completed in a timely manner and in line with the specifications. All the technical and qualitative parameters of the order, the terms of the guarantee and time for completion are specified in detail in the Terms of Reference.

Fact (7): It is a fact that there is no definition of an "abnormally low price" thus limiting the possibility of disqualifying a contractor for this reason. A six-month delay in the execution of a project was caused by a court hearing as a result of which GDDKiA had to reinstate a Contractor who had been disqualified due to an abnormally low price.

Myth (8): It is a myth that contractors have no influence over the provisions of Terms of Reference, and the deadline for submitting bids is too short. The average actual deadline for submitting bids in the analysed GDDKiA tenders in the years 2011-2013 was nearly twice more than the minimum deadline required under the Act.

Fact (9): It is a fact that the verification of 'the contractors' potential is based on the contractors' own declarations. The role of financial institutions which guarantee the financial liquidity of contractors is to verify the profitability of their bids.

Re. Myth (6). In the opinion of branch experts, this mythology applies only for works tenders. In the case of tenders for intellectual services (design, engineering services) usage of lowest price selection criteria actually prevents effective implementation. Quality assessment of the tender documentation recognised by the report as being "specified in details" is incorrect. These documents are of low or very low quality, if they were good there would be no need for action described as part of Fact (5).

Re. Fact (7). The authors of the report are flagrantly selective assigning attribute of fact or myth to respective problems. It is impossible to disagree with fact of lack of such definition, but it is a myth that over the years of practice there was no possibility to create a price verification practices of contractors and to develop standards for the exclusion of bids offering abnormally low prices. It is also a myth that the key public contracting authority in this part of Europe, had mindlessly use "line of jurisprudence" of National Board of Appeal (KIO). It has to be noted that the judgments of KIO are binding only in a case in which they are issued. They are not binding in other cases, since they do not constitute precedents.

Re. Myth (8). The authors clearly do not know the practices of application of public procurement law performed by GDDKiA. The real myth is the potential influence of the tenderers on the content of tender documents. The contractor, in practice does not have any influence on it, this influence is only a potential theoretical possibility, as inscribed in the act. GDDKiA agrees to change the tender dossier only in cases of obvious inaccuracies. In other cases, such as conditions of contract is consistently refusing any changes. The report does not analyze the actual causes

of the extension of time for submission of bids. Most often it is the result of a huge number of questions to the tender dossier. [*there are many: a) because many companies applying for contracts, b) due to the low quality of the specifications or c) inaccurate description of the contract*]. Delays caused by the poor quality of tender documents may reach several months.

Re. Fact (9). This fact remains unrelated with the further content. It seems that the authors of the report made a serious essential mistake. What are "financial institutions which guarantee the financial liquidity of contractors"? Banks, insurers, who? And even if that would be banks, how can these institutions "verify the profitability of their (contractors) bids"? The reliability evaluation of bidding contractors is primary duty and responsibility of the investor. In the EU and other developed countries, the contracting authority shall examine whether the contractor is actually reliable and would be able to accomplish given contract.

#### PwC Report: DILEMMA 4: How to allocate tasks and obligations between investors and contractors to make them partners who feel mutually responsible for the results of a project?

A road investment project is a complex, long-term process. GDDKiA would also like contractors to feel responsible for the results of a project. Therefore, according to the terms of the contract, the tasks and related risks are allocated as a result of which both parties not only care about completing the project but also ensure that its quality is as high as possible.

The report states that GDDKiA wants contractors to feel co-responsible for the project outcome – that's an understatement. GDDKiA's ambition is to make the contractor the sole responsible party for the project (see: "customize and build" scheme). Without a change in approach of GDDKiA to the whole project implementation system, the dilemma will remain on the map.

## PwC Report: DILEMMA 4: – facts and myths

Fact (10): It is a fact that the risks in contracts are allocated to both parties, and their allocation is based on international FIDIC Conditions of contracts. Since the beginning of 2013, 37 meetings of working teams have been held with the participation of industry representatives and GDDKiA, during which provisions for individual standard contracts were analysed and agreed.

Re. Fact (10) This is the fact that the risks in the contracts are allocated to both parties, but - as the report neglected to mention - are allocated unequally, most of the risks (even those for which normally investor should be responsible) are delegated to the contractor – which is the primary complaint of NGO's.

Risk allocation is indeed based on the international FIDIC contract conditions standards, but they are (by special conditions) completely altered perverting the main ideas of FIDIC philosophy. The report once again says nothing on the subject.

## PwC Report: DILEMMA 5: What solutions should be implemented to increase the stability of contractors' functioning and, thus mitigate the risk of failing to complete an investment project in a timely manner?

GDDKiA is aware of the impact of market trends and macroeconomic processes on contractors. Solutions are being implemented to give contractors a sense of security and stability and minimize their risks. In this way, the risks of delays or failing to complete an investment project are also mitigated.

The report attempts to convince the reader that GDDKiA allegedly struggle with contractual phenomena unprecedented in the civilized world. However, the solution to most problems is to return to the solutions formerly used, which were abandoned in 2007 and in 2008.

It was repeatedly invoked by the NGO's representatives, but also the wide range of the required changes have been presented and justified in the Report of the Minister Janusz Piechociński, published in July 2012.

## PwC Report: Dilemma 5: – facts and myths

Myth (11): It is a myth that there is no price indexation. Claiming that an investment project may not be completed without indexation is also groundless. Prices were valorized on two pilot investment projects. As a result, the contractual amount increased by 1%. Despite the fact that both projects had similar problems, and the unit prices were valorized, one of them was completed in May 2013, whereas only 75% of the other has been completed.

Myth (12): It is a myth that GDDKiA does not give the contractor the possibility of collecting an advance payment. The possibility of collecting an advance payment, which has so far been used in certain contracts, has been incorporated in the model contractual terms which are being drawn up in consultation with the industry and which will be obligatory in the new tenders to be announced by GDDKiA under the new financial perspective.

Fact (13): It is a fact that GDDKiA settles its obligations to contractors in a timely manner, and that in justified cases it even accelerates payments. The payment of invoices to contractors has been accelerated by an average of 24 days, and in certain cases by as much as 48 days.

Fact (14): It is a fact that in over almost the last ten years of implementation of investment projects by GDDKiA, in 74% of cases the contractual deadline was met. The delays in investment projects in Poland are among the shortest in Europe. According to a report by the European Court of Auditors, in Poland the average delay in completing investment projects is 2.7 months, in Germany it is seven months, and in Greece more than a year.

Fact (15): It is a fact that in justified cases GDDKiA accepts its Contractors' claims, which includes increasing the amount of the contract. In 2009, at the European Commission's request, limiting the freedom to add annexes to concluded contracts was incorporated in the Pzp. Act. The total by which amounts of contracts were increased in the years 2007–2013 was PLN 804m gross.

Re. Myth (11) In fact, this is an imbedded myth - Myth in the myth - indexation was introduced, but at the negligibly small level, formally it does exist, but in practice it does not. References to the research carried out on a sample of two contracts to draw conclusions is methodological mistake. Conclusions concerning indexation with reference to these examples are misleading.

Re. Myth (12). When the authors cannot say that something is a fact (because it would not sound very credible) they turn it into myth through the negation of the discussed issue. It could be stated this way: that it is a fact that GDDKiA creates opportunities for advance payments for the contractors, but this obviously is not true. Over the past seven years not a single contract for works was signed with advance payment clause (for contractors chosen by tendering procedure). Thus, the GDDKiA provides opportunities and do not use them, or does it in some rare

cases. The unique wordplay resembling deliberate manipulation. Taking into account the advance payments in future contracts templates is the de-facto back to a much earlier practice, used during pre-accession aid programs of ISPA, PHARE, and then abandoned during current financial perspective.

Re. Fact (13). The fact of commencement the payment for approved invoice does not constitute the problem, it is its' approval by GDDKiA which does. This approval may take months, although during recent year this process has been improved.

Re. Fact (14) It should be noted that time for completion of the contract contains all extensions in accordance with contract conditions. To evaluate the effectiveness of the implementation, the difference between the actual time for completion and schedule envisaged at the tendering stage should be examined. This would reflect more complete picture and would provide better knowledge for the contracting authority in the planning process for future investments. The ECA report, cited by PwC has been developed on the basis of incorrect information provided to auditors of the ECA by Polish side. For more information on low reliability of data concerning Polish projects included in ECA report can be found at: [www.pzpb.com.pl](http://www.pzpb.com.pl) (tab: "download")

Re. Fact (15). Essential in that fact is who decides that the case is "justified", of course only GDDKiA decides in that respect, which makes them a judge in their own case. As a result of deprivation of Engineer's authority to act in this area, most of the claims goes to court for years. It is not true that the change in the value of the contract or time for its completion does not require any further annexes. This scheme is the result of adoption of a flawed system, and not the effect contractual events. For this reason, cited amendments should not have any reference to the observed cost and time growth.

## PwC Report: DILEMMA 6: How to supervise the work properly in order to ensure that the roads serve the users as long as possible?

An effective system of control and supervision over the execution of investment projects makes it possible to avoid errors and ensure top quality projects which is why GDDKiA is investing in supervisory processes and control over investment projects both in the course of their execution and after they have been commissioned for use. As a result, the roads being built will serve drivers in Poland for as long as possible.

This is not an actual dilemma, but the question on the adoption of investment implementation model. The report says, that GDDKiA „is investing in supervisory processes”, but at the same time selects the cheapest FIDIC engineers supervising works. The quality of the service they provide is decreasing steadily, and the deprivation of competence from FIDIC Engineers exempts them from responsibility for the construction process. If GDDKiA, as in most EU countries would choose best engineers there would be no need to invest in laboratories, which now will have to be subsidized. Again, the consequences were mistaken with reasons.

## PwC Report: DILEMMA 6: – facts and myths

Fact (16): It is a fact that GDDKiA is investing in quality control over the roads built at all stages of the execution of investment projects. GDDKiA has invested PLN 100m in building a network of modern road laboratories. The percentage of faulty samples fell by 12% in the years 2010-2012. At present, 85% of the samples tested meet the criteria. The number of samples tested in GDDKiA laboratories between 2010 and 2012 increased by more than threefold.

Myth (17): It is a myth that roads need to be repaired shortly after they have been commissioned for use. Contracts for the maintenance of roads using the "Maintain the standard" formula already function on 800 km of Polish national roads. Since 2012 each road newly commissioned for use has been maintained in accordance with this standard.

Re. Fact (16) Investing in laboratories is certainly reasonable and purposeful action, provided that we know how to properly utilize the opportunities these laboratories provide.

An important element of the laboratory operation is their competence in understanding of testing procedures and adequate repeatability of results.

That applies to both the procedure for testing performance in the laboratory as well as methods of sampling on the site, storage, and proper evaluation of the results including their confidence level.

Laboratories adhering to quality criteria can obtain an accreditation certificate. Only laboratory with accreditation ensures both the quality of the studies and their legal usefulness.

Re. Myth (17) All the professional organizations of engineers and contractors confirm that this is myth.

## PwC Report: Dilemma 7: What can be done when partners do not obey the legal regulations?

Effective execution of investment projects requires the cooperation and involvement of all interested parties. A lack thereof, or acting contrary to the requirements of the law, could result not only in delays but also in suspending the execution of investment projects and increasing the costs thereof. It could also mean that the liabilities incurred will have to be settled by other entities, including the investor.

Why, the authors analyze the situation only if the law is not obeyed by the partner - the contractor. Why does not analyze the consequences if the law is not obeyed by the “partner” – contracting authority.

Basic analytical correctness should encourage the authors to examine how often contractors accused GDDKiA of breaking the law. And these are not insignificant cases with a total value estimated claims at 10 billion PLN.

## PwC Report: Dilemma 7: – facts and myths

Fact (18): It is a fact that the execution of investments may be hampered as a result of price collusion by the contractors. Even as much as PLN 50m of subsidies will have to be returned by one Polish city if the European Commission confirms the suspicion of the existence of price collusion. Industry representatives have recognized this problem and are drawing up a code of ethics for the sector.

Fact (19): It is a fact that GDDKiA settles general contractors' obligations to other enterprises in compliance with the law. The value of all dues to firms paid by GDDKiA so far is now more than PLN 937m.

Re. Fact (18). Such a possibility potentially exists. But recalling the example of one of Polish cities, which may have to pay-back part of the EU grant, if the suspicion of collusive pricing would confirm in no way translates into a situation of GDDKiA.



This is an obvious allusion to the case of the alleged collusion of several companies for a number of tenders for the highway construction. Until the date of publication of the report no such crime was proven to anyone, and taking into account the number of tendering procedures carried out by GDDKiA, this is a negligible margin.

Re. Fact (19) should be preceded by the fact (18.5) , according to which taking into account the following reasons:

- faulty project implementation policy, starting from designer selection, the contractor and the FIDIC Engineer selection ;
- opening of the market for players/participants from all over the world;
- faulty verification of entities applying for public contracts;
- providing contractors with defective design documentation ;
- denial of payments for additional works;
- oppressive policy of imposing contractual penalties ;
- unrealistic schedules for works completion
- delays in payments ( acceptance of interim payment certificates)

about 10-15 percent of the general contractors :

- lost their liquidity
- were forced to leave the construction site or go bankruptcy , and hundreds of sub- contractors fell into serious trouble or were liquidated.

Under such conditions, the critical situation, in which the contractor can no longer pay the subcontractors is a must. Than subcontractors make public protest at parliament and then deputies engage in “extinguishing” of the conflict. It is worth noting that casuistic law (introduced for this purpose only) was the ground for payment of less than 18% of the amount stated in the report.

## PwC Report: Dilemma 8: How can the expectations of all stakeholders in the course of the investment process be taken into account while at the same time ensuring the projects' economic effectiveness?

Designing and building roads requires the involvement of a number of stakeholders at various stages of the project. Their expectations are important, but they may also be at odds with the economic interests of the project and the investor which is why GDDKiA meets all the legal requirements concerning social and environmental issues, but also conducts an on-going dialogue aimed at finding an effective compromise between social, environmental, as well as economic expectations.

This issue indeed constitutes the dilemma problem. There is of course no possibility to satisfy all the stakeholders, but politics is the art of compromise. Public investor always must operate in conflict-prone environments and it is neither a surprise nor an abnormal situation.

It is important however, what course of action informed investor should take not only to minimize the effects, but also to minimize causes of conflict. The role of the public investor as an initiator of new ways to solve problems or changes in the law is particularly important. Unfortunately, despite GDDKiA real impact on the legislative initiative, the agency does not use this opportunity.

## PwC Report: Dilemma 8: – facts and myths

**Fact (20):** It is a fact that social expectations and legal requirements with regard to environmental protection affect the costs of an investment project. Environmental protection costs represent 7% to 15% of the total costs of an investment project. Meeting specific environmental protection requirements makes it possible to raise EU funds to implement investment projects. So far GDDKiA has obtained 77% of refunds, thus confirming that all requirements are met. GDDKiA met 141 demands from among a total of 300 questions raised by residents during consultations about the concept for the S8 Radziejowice - Paszkow highway.

**Myth (21):** It is a myth that the process of land acquisition for investment projects is always met with hostility by local communities. The instances in which the process of obtaining land for investment projects is met with hostility by local communities amounts to less than 1%.

Yet another financial perspective involves the need to make careful preparations and put into practice the experience gained from the implementation of investment projects in the financing period 2007-2013, with positive effects for all entities.

**Re. Fact (20).** One of the main problems have become sound walls. After completing hundreds of kilometers of sound walls worth hundreds of millions of PLN spent by GDDKiA, the legislative changes were initiated by .... governor of Mazovia province in connection with plans to build the sound walls along the railway line

in Warsaw. Previously GDDKiA was not interested in changing the law, which would allow to reduce the noise standards and therefore contribute to huge savings in investment costs.

Polish environment protection requirements are more restrict than the European, especially in the area of noise protection standards.

The number demands taken into account is not crucial, but the type and quality of these demands as well as their implementation. Many demands may be senseless and cost productive - their inclusion is not a reason for complacency.

Re. Myth (21). There is no reliable data that would show that only 1% of cases results in the reluctance of local communities. Above all, the State should remain honest against a citizen, but now the compensation covers only the actual damage, not redress for the damage resulting from the expropriation for the public purpose.

## abbreviations:

ECA – European Court of Auditors

Pzp – Polish Public Procurement Law

GDDKiA – General Directorate of Roads and Highways

NSRO –National Strategic Reference Frame

PwC – PwC Polska

## Summary

The report does not compare the initial allocation to the final costs. Flexibility in moving funds among budget lines for projects allowed achieving contracting on the level of 100 % and this is only accounting treatment. In addition, contracting EU funds is a prerequisite, but insufficient to confirm their disbursement.

That means, that in case of any additional implementation costs they will not be co-financed and will charge Polish taxpayer entirely. The report does not address these issues, but according to the report of the European Court of Justice, quoted by PwC, the average construction cost growth in Europe is on the level of 23% of the contract value.

Contracting of funds unfortunately is not proof of the correct spending of EU funds. Only after the completion of projects it will be possible to assess the propriety (or not) of their spending.

The report selectively quotes and uses indicators, for example:

- " Substantial improvement " has not been defined in the NSRO (National Strategic Reference Frame) and twice amended National Road Construction Programs - nowhere in the programming documents indicating the specific tasks to be performed we can find determination of scope as "significant improvement of the state of the national infrastructure "
- When the role of implementing agency for road component of Cohesion Fund was imposed on GDDKiA "appropriate guaranties" were not a separate task; How cost-effectiveness was measured – only on the basis of comparison of tender prices to cost estimates done by the employer?

What indicators were used to examine the quality of works?

- "increasing competitiveness" in the construction industry has not been recognized anywhere as a separate task for GDDKiA. Was the bankruptcies of construction companies the goal, and the number of bankruptcies measure for increase the competitiveness on the construction market?

Tasks (thus never described) have not been completed or their completion led to counterproductive results:

- although the number of kilometers of roads increased, the program objectives were not achieved- none of the country traffic routes were finalized!
- There are no known mechanisms to obtain "rational prices" used by GDDKiA that could in any way contribute to a decrease tender prices. The practice of unrestricted access to the Polish public procurement market, cannot be called a "rationalization of prices". It is also risky to compare prices for one kilometer highway in any given conditions. Such index is dependent on too many factors therefore such averaging is of little importance from an analytical point of view.
- The warranty period has been increased (by GDDKiA), it didn't increase spontaneously as report states. In addition, the extension of warranty periods for ongoing contracts was imposed on the contractors by a dubious investor pressure under the threat of payment denial or order to re-execute the road construction. As a result, the warranty period was extended de - facto forcing the contractor to provide maintenance of the road section.
- None of the laboratories operating in the period 2008 -2011 did not have proper accreditation certificate required by the law.

- Fivefold increase in the number of entities performing contracts for GDDKiA in no way translated into effective disbursement of funds, the quality of roads and the time for completion. There are no studies that would prove the existence of a positive impact on the road construction process, not mentioning that report didn't say what period was analysed.
- The report doesn't prove that the increase in the number of bids translated in any way to competitiveness of the construction market. (allegedly defined according to the report). The argument quoted therefore in our opinion is strongly impermissible.

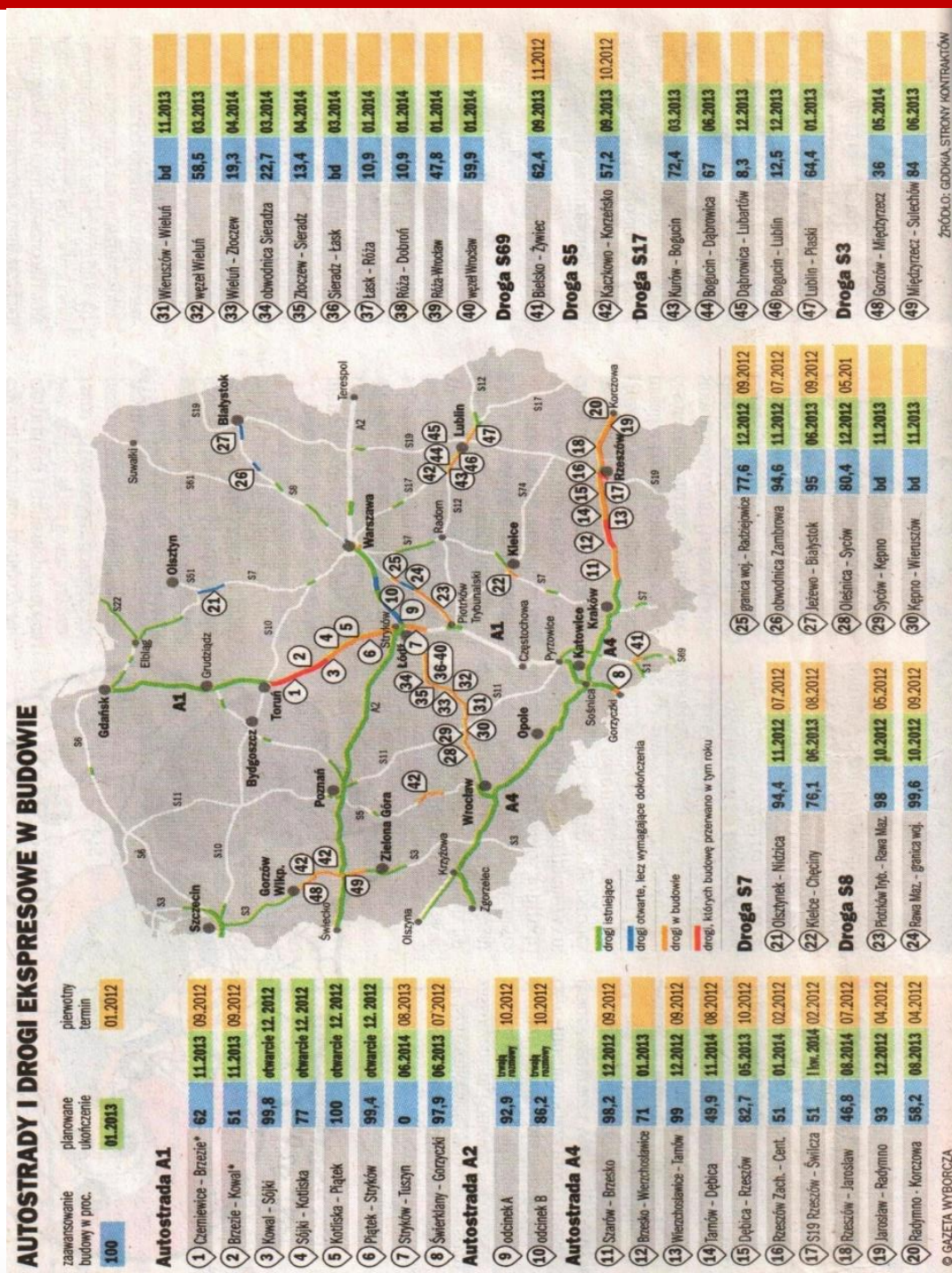
It should be noted that the reasonable development of the country (according to the European approach toward sustainability) should be based on long-term investment programming, as far reaching as possible to create a stable construction market environment. Large and dynamic changes in public investment are creating tensions on the market, which usually ends with significant social costs (during development phase construction cost increases, during economic slowdown this costs is unemployment and bankruptcies).



## Appendix 1

### Initial times for completion vs. reality

Due to the increased number of legends and myths that delays of roads construction in Poland in principle, does not occur, and that Poland is one of the fastest and most time efficient builders within the European community, the authors of this analysis attach (below) the list of time for completion for roads published in Gazeta Wyborcza (edition of 22 October 2012)





## Appendix 2

### Experts' voice on the investments realization in Poland.

Following the analyses of the investment realization system in Poland, some practitioners' and respected authorities' voice of interest is quoted below

#### **Prof. Stanisław Sołtysiński: Speech at the European Financial Congress, Sopot, June 25th 2013**

Conciliation becomes the applied solution in a minimal percentage of litigations related to construction works or concession agreements. Supporters of mediation stress that, according to various estimates, 65 to 90 percent of economical litigations are settled prior to the court's verdict in the USA. While such rate exceeds 40% in the United Kingdom and totals 10% in Germany, in Poland conciliation merely accounts for several percent of litigations, likely being even less in case of public administration vs. entrepreneurs disputes. Since public administration officers fear being accused of acting to the State's detriment and bearing responsibility for excessive initiative, they are more likely to run long-term trials and keep resorting to any possible means of appeal.

It seems that the easiest and least controversial postulate would be to introduce such modifications to the PzP Act that would define additional criteria along the Act's sole price criterion: time for completion, Contractor's qualifications or types of contract guarantees. Concessions and construction works contracts should foresee alterations of payments or other contract obligations in case of cost increase or impediments in the investment following significant occurrences. In order to ensure a correct balance in the process of drafting such contract models, representatives of Contractors' branch organizations should be allowed to participate as consultants.

However, criticism against the missing figure – or the improper role – of the so called “contract engineer”, who is supposed to verify quality of works and help settle some litigations between the Sides - is legitimate. Such entity exists, for example, in the so called “red FIDIC”. In practice, however, a Polish contract engineer is not sufficiently independent as they are hired by the Client (e.g. GDDKiA) and treated as its dependent assistant in the litigations with the Contractor.

## **Prof. Witold Orłowski: Completing the A2 is slower than sluggish**

**Commissioning the A2 motorway from Stryków to Konotopa in June last year did not mean the works would have been completed soon; parking lots and gas stations along the route are missing to this day. Mr Witold Orłowski, an economist, is disconcerted by such approach to carrying out infrastructural investments, he explains in a comment for the Polish radio broadcaster TOK FM.**

‘I have taken the motorway from Łódź to Warszawa. The motorway was handed over in an all-out effort before the Euro 2012 games, something nobody had believed could happen’ – said Mr Orłowski. Nonetheless, he is astounded as to why the works have not been completed ever since. Motorway service areas are still missing whereas everybody believed the road would have been completed soon after the Euro 2012 Championship. ‘Once in mid-June of last year all the works were suspended, nothing has happened since. A snail is as fast as an express train if compared to the speed of this construction’, Mr Orłowski commented.

He added that the fact the Contractor was able to mobilize and ensure transitivity of the entire motorway in 6 months, but hasn’t managed to build parkings within the following 18 months, seems particularly problematic.

A part of the A2 motorway is now being built by yet another contractor. Covec was first on the segment C, followed by DSS and finally Boegl a Krysl. Contractors in Poland are selected on the basis of lowest price criterion which in turn leads to much more contractor replacements than necessary.

**‘This is the result of our inability to construct an efficient State machinery in the last 22 years. Inefficient, incompetent and underpaid officers are apprehensive and only make decisions they feel safe about. One the only safe decision in a bid is to base everything on the price; any other would entail bearing responsibility and risk’ – Mr Orłowski judged.**

## **Janusz Piechociński: Report on the Building Industry 2012**

„A properly functioning market of infrastructural investments particularly requires:

1. A relation of partnership between the Client and the Contractor;
2. A change in attitude – often being more important than the letter of law or the equality of Sides that stems from the civil-law character of their relationship;
3. Loosening the importance of price criterion when selecting the Contractor;
4. Understanding that the lowest price does not guarantee the quality of execution;
5. Understanding that the Contractor’s remuneration must include their profit;
6. Introducing realistic times for completion;
7. Introducing real negotiations leading to stipulation of contracts based on side-equality;
8. Elaborating a proprietary contract model, compliant with the Polish law;
9. **Regularizing the role of Contract Engineer as an entity selected by both Sides;**
10. **Defining clear and thorough grounds for settling claims advanced by the Contractor during the carrying-out of the contract”**

## **Adam Smith Center, “Polish Roads” report, 2013**

The inequality of Sides also results from the GDDKiA suspending payments to the Contractors, often without a legitimate cause. In the fall of 2012, those arrears amounted to over 4 billion Polish zlotys. Today they reach 6 billion. GDDKiA sustains those claims are not justifiable and cites the Contractors’ tentatives to partially cover the losses they are responsible for as the main reason for such demands. While such accusations may partially be legitimate, they don’t justify the scale of payment obstruction.

## **Polish Road Congress: report „National Roads Construction Program. Guidelines and circumstances – Process of realization and its results – Effects on the road sector”, 2013**

Polish Building Industry amounts to approx. 6% of Poland’s GDP. Termination or suspension of construction works results in an immediate jump of unemployment indices in the country. An estimated 150'000 of employees will be laid off; obviously, these dismissals are already underway. As of today, it is difficult to assess the scale of dismissals and bankruptcies, particularly among the small enterprises or self-employments.

Experts are warning that the building industry crisis recalls that of 2002-2003 when the entire production worth dropped by 25%. In an industry with 600'000 jobs one in four could be lost. As research proves, 100 jobs in constructions create further 300-400 positions in the cooperating sectors. Unfortunately, this relationship works in both directions.

The risk of bankruptcies of numerous companies, collapse of the entire industry and the threat of losing as many as 150'000 jobs in constructions will lead to an irrevocable loss of the industry’s potential – which in turn will call into question

whether building the roads foreseen in the new EU budget perspective will at all be feasible.

In the six years following the adoption of the first National Roads Building Program, there have been numerous material and financial amendments to it. Even though it had obtained massive support from the EU financial resources – booked mainly in the Operational Program “Infrastructure and Environment” – not even 50% of the Program has been carried out. Particularly in the “express roads” section the results fail to reflect the assumptions.

Even if the assumed results of the program had been difficult to achieve with the given expenses, still the ineffective running of investments has set us back years apart from such achievements. Extra chaos has been introduced by the change in investments financing, directing all resources to the National Road Fund (KFD). After 4 years, its debt has reached 41 billion Polish zlotys, new obligations have to be taken on in order to settle the old ones, while annual income from the electronic fee collection on the built roads is not sufficient for the sole debt-service, excluding the repayment of bonds.

The managing model of the investments has proven extremely ineffective. The process of selecting Contractors, stipulation of the contracts and cooperation between the Client and the Contractors all call for urgent changes. The contracts should be based upon FIDIC Contract Conditions, free from distortions caused by defections. It is the only way to avoid resolving ruining technical litigations in the courtroom. The worth of all contractors’ claims is only known from estimates and is said to total between 4 to 10 billion Polish zlotys. The number of open cases in Polish courts is a proof of fundamental shortcomings in the investment realization by public investors and harms Poland’s image as a place to run business.

One unwanted effect of this situation is the fact that the Building Industry has become the third subject – after the EU and the Government budget – to finance Polish road infrastructure: the amount of confirmed claims constitutes the Industry’s participation. But it is not the result everybody thought of in 2007 when they put their hope in a newly introduced Road Building Program for Poland.