Models of contract award procedures for maintenance tasks on national roads

October 2016
What are the objectives we must deliver?

**Strategic objective**

The strategic objective of GDDKiA in the area of road and bridge management is establishment and continuous development of linear service structures and selection of optimal maintenance tools to ensure regular improvement of national road network quality and thus to provide their users with adequate and acceptable safety and travel comfort level.

**Operational objectives**

1. Working-out and implementation of an optimal model of contract award procedure and delivery of maintenance task in a way to use the available resources as effectively as possible in context of strategic objective and at the same time to ensure relevant flexibility of the organization in the case of crisis responding.

2. Review, modernization and unification of GDDKiA maintenance structures – with a view to enhance the road network maintenance and protection-related activities, including civil engineering structures, ensuring their stability, guaranteeing road traffic safety and effective traffic management.
Why is it so important?

✓ Current development of road network and significant increase in the number of civil engineering structures

NATIONAL ROAD AND MOTORWAY NETWORK

As of 31 December 2004

LEGEND

EXPRESS ROADS AND MOTORWAYS
EXISTING

Target motorway system
Other national roads
Voivodeship/GDDKiA branch limits
Cities under poviat rights
Why is it so important?

- Current development of road network and significant increase in the number of civil engineering structures
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✓ Current development of road network and significant increase in the number of civil engineering structures
Why is it so important?

- Increasing expectations of road users in the area of safety and comfort of travelling.

- Service available in 24h/day mode
- Response time to road traffic threats – handling road events
- Dynamic road traffic management
- Delivery of tasks in compliance with standards in each case
Why is it so important?

✓ Need to rationalise the number of controlled maintenance work contracts in context of increasing number of linear service tasks.

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<tr>
<th></th>
<th>Mixed</th>
<th>Linear</th>
<th>Area</th>
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<tbody>
<tr>
<td>Total</td>
<td>1122</td>
<td>29</td>
<td>5</td>
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Total 1156
How we achieved this?

**Performance based contracts** ➔ **Contracts, settlement of which is based on the effect**

The performance based contracts, referred to also as the indicator or output based contracts have been applied in operational activity of the public sector for many years. In certain countries, use of performance based models is applied on an obligatory basis.
How we achieved this?

- **2005** – World Bank Transport Bulletin—“Input based contracts for maintenance and enhancement of road infrastructure”.

- **2011** – GDDKiA received the Report under the Better Government Program (Ernst & Young, „Effectiveness of national roads maintenance management in Poland”) – international comparison of methods of effective road maintenance management in terms of finance and function.

- **2012** – Financial analysis by Price Waterhouse Coopers pt. “Comparison of financial effects of road maintenance models for GDDKiA on the example of the selected express road section”

- **2013** – Ministry of Regional Development refers to the correspondence with the European Commission, in which the Commission states that „One of the potential methods ensuring maintenance of road infrastructure at the optimal level are multi-annual maintenance contracts, including the „Keep the standard” model already presented to the European Commission services”

- **2015** – Establishing of the Permanent Standardization Committee of GDDKiA involved in preparation of the template documentation forming a basis for contracting all-year and complex maintenance of national roads in a given area.
How we achieved this?

Strategy Map

Ensuring high quality of services for the national road users, meeting at the same time the expectations of external and internal interested parties, budgetary and organisational limitations.

- Understanding values and strategy for GDDKiA employees
- A training system tailored to challenges on the road to understanding
- Clear and uniform procedures
- Demonstration of actions and tasks
- Implementation of supporting tools (IT)
How we achieved this?

Action Plan

Step 1: Preparing the Tender Process for 1 Year

Step 2: DOC and Tender Procedure

Step 3: Preparation of DOC and Tender Procedure

Step 4: Meeting with Employees

Step 5: Communication of Change Direction

Step 6: Road Line Launching

Step 7: Location of Districts and Regions

Step 8: Target Structure of Districts and Regions

Step 9: Employment Structure of Districts and Regions

Step 10: Distributed Contract Analysis

Step 11: Performance Confirmation Document

Step 12: Tender Analysis

Step 13: Tender Summary Meeting with Contractors

Step 14: Event

Step 15: Analysis of External Environment

Step 16: Analysis of Personnel and Machinery Resources

Step 17: Personnel Training

Step 18: Meetings with Units and Branches

Step 19: Branch Action Plan by 2020

Step 20: Branch Report from the Tender Procedure

Step 21: Report from the Meeting and Recommendations

Step 22: Complaints and Requests of Internal/External Customers

Step 23: Complaints and Requests of Contractors/Subcontractors

Step 24: Analysis of External Environment

How we achieved this?
Analysis of different maintenance models

Own resources
Jobs: 0.6 full contract job per km * 17582km = 10550 full contract jobs
Equipment replacement value of PLN 1795 x 12 months * 17582km
app. PLN 380 million per annum for 5 years

Mixed model

„Keep the Standard” model

Quasi-Standard model

Area model

Area model recommended by the Permanent Standardization Committee is a model based on settling the contractor for its expected outputs (performance-based), however eliminates the risk which may arise when applying the Keep the Standard model and uses the Quasi-Standard model as an intermediate stage.

How we achieved this?
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Area model – target model

Key assumptions

✓ Use of template documentation for all maintenance contracts

✓ Uniform terms and conditions of participation in the tender procedure.

✓ Uniform criteria for contractor selection.

✓ The contract is signed for the period of 5 years.

✓ The contract is signed for all-year maintenance of national roads administered by the Branch, 50-70 km long sections.
Thank you for your attention