System of maintenance contracting under Performance Based Contracts - biggest transparency and savings in contracts

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ENSURING SERVICES OF THE BEST POSSIBLE QUALITY FOR THE CLIENTS

BECOMING A PUBLIC ENTITY FOCUSED ON MEETING THE CLIENT’S NEEDS
I. Functional and safe grid of national roads

II. Efficient and effective management:
   1. of the assets
   2. of the traffic
   3. of the safety

II.1. Managing the assets:
   A. Routine maintenance strategy
   B. Periodic maintenance strategy
   C. Profit generation strategy

II.2. Traffic management:
   A. ITS strategy – development and implementation in the grid of national roads
   B. The strategy of labelling and organising the traffic

II.3. Safety management:
   A. National Road Traffic Safety Programme
   B. Strategic safety management

Defining 'a service' and its performance mode

Basic objective

Subject matter and mode of managing to achieve the objective

Strategic collections of tools used to achieve the objective
Diagnosis of the starting point

- Poor method of funds distribution
- Lack of supervision over spending the funds
- Lack of connection between the diagnostics of the road grid with the realized tasks
- Lack of uniform maintenance standards throughout the entire grid
- Lack of a consistent model of maintenance management
- Lack of a national action plan concerning maintenance, renovations and reconstructions
- Low financial efficiency
Undertaken actions

• Working out a model of maintenance management
• Introducing uniform maintenance standards
• Introducing contracts for routine maintenance based on indicative settlements – *PBC*
• Preparing and realizing a multi-annual action plan within the existing grid based on the data and algorithms
• Changing the system of road diagnostics in connection with the action plan and programme for the existing grid
Routine management

What elements are present on the roads

What is the required maintenance standard

What is needed by the Contractors to perform the services

How we regulate formal issues

What financial benefits has been gained as a result of the changes
Maintaining indicated standard of the road

Performing maintenance work

Managing maintenance work

PBC’s rules in Poland
**Indicators**

**Technical**
- Roughness
- Evenness
- Carrying capacity
- Depth of ruts and reductions

**Non-technical**
- Performance
- Result
- Type objective/performance

**Movement**
- Traffic capacity
- Fluidity
- Safety

**Economic**
- Cost-efficiency
- Financing level
- Social-economic efficiency

**Efficiency indicators**
### Clear settlement principles

The use of a single, measurable indicators –

determination of the indicators value

<table>
<thead>
<tr>
<th>Elements of road and its equipment</th>
<th>Standard I</th>
<th>Standard II</th>
<th>Standard III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td></td>
<td></td>
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<tr>
<td>taking actions / deadline to act</td>
<td></td>
<td></td>
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<tr>
<td>deviation from a rule</td>
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<tr>
<td>removal</td>
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<tr>
<td>Description</td>
<td>area evenly covered with plants Accepted high of grass: - in median lane max. 15 cm, - from lane edge to cut slope max. 15 cm, - for cut slope to edge of road max 25 cm.</td>
<td>area evenly covered with plants Accepted high of grass: - in median lane max. 20 cm, - from lane edge to cut slope max. 20 cm, - from cut slope to edge of road max 30 cm.</td>
<td>area evenly covered with plants Accepted high of grass: - in median lane max. 25 cm, - from lane edge to cut slope max. 25 cm, - from cut slope to edge of road max 30 cm.</td>
</tr>
<tr>
<td>taking actions / deadline to act</td>
<td>up to 24 hours</td>
<td>up to 2 weeks</td>
<td>up to 24 hours</td>
</tr>
<tr>
<td>removal</td>
<td>up to 2 weeks</td>
<td>up to 4 weeks</td>
<td>up to 6 weeks</td>
</tr>
</tbody>
</table>
The use of a single, measurable indicators – control

1. Indicator: Length of grass
2. The method to determine whether the indicator has been achieved: the measurement
3. Principle of indicator measurement: the measurement is done with a simple tool - straight edge angle on selected areas of the surface of 10 m2 with different lighting conditions and irrigation
Minimalization of organizing the maintenance works

GDDKiA does not indicate the frequency and method of maintenance and ad hoc works

Contractor manage maintenance and ad hoc works
Uniform cooperation principles

Principles:

- Legality
- Economy
- Purposefulness

- Set Scope
- Set Money
- Set Time
The use of a unified tender documents

description of the contract

penalty card

performance monitoring indicators

the model contract
All PBC contracts – app. 850 km

Sections of roads with PBC contracts
Important words as a conclusion

- Managing the Organisation
  - Efficiency
  - Effectiveness

- Managing the Process
  - Countability
  - Measurability

- Managing the Contract
  - Purposefulness
  - Legality
  - Economy
EFFICIENCY
- achieving best results
- maximizing profits
- optimal use of resources

EFFECTIVENESS
- relation of results to expenses
- careful supervision and reduction of costs
- applying relevant processes
Investor's cost-estimate for PBC contracts – 100%

- PWC indicates savings at about 10%
- The World Bank indicates savings up to 40%
- GDDKiA, comparing the investor's cost-estimate with the contract price, indicates 30% difference compared with the planned amount

Average contract prices – 70%
Next steps

- Developing the provisions of standard documents and standard road maintenance
- Preparing the road user card (analysis of users’ needs)
- Introduction of area road maintenance in the PBC model
- Preparing and implementing indicators concerning the structure and surface of the road (DSN)