

# How do we assure that we get the quality we have ordered?

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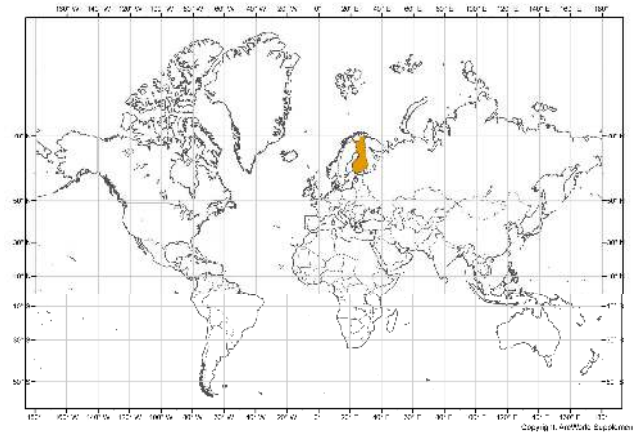
## 0. CONTENT

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1. Introduction
2. Quality assurance during the tendering phase
3. Quality assurance during the term of contract
3. Customer perspective on quality
4. Thoughts on the future

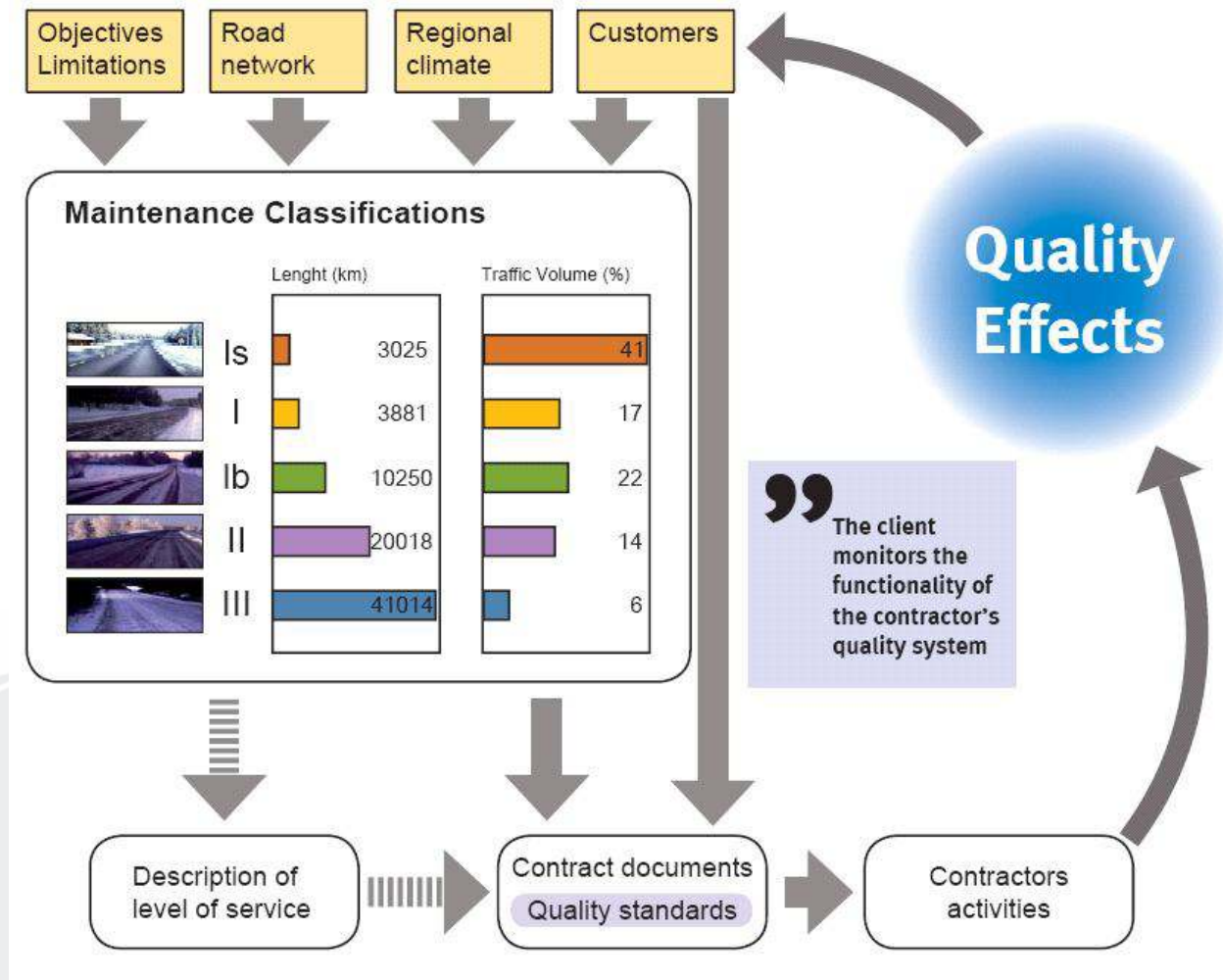


# 1. INTRODUCTION - Finland



- 5 300 000 inhabitants
- the public road network: **78000 km**
- **lower speed limits** during winter (120 -> 100 km/h, 100 -> 80 km/h)
- **driver education**: special training for driving in slippery winter conditions is mandatory
- **winter tires** are mandatory, most cars use studded tires
- **salt** used mainly in 6000-7000 km
- maintenance of public roads is contracted out entirely, **performance-based contracts**
- 81 regional contracts (500-2000 km), 6 contractors, 5-7 year contracts
- total €200 million a year, winter maintenance **€100 million** a year

# 1. INTRODUCTION – on the quality of winter maintenance



## 2. QUALITY ASSURANCE DURING THE TENDERING PHASE

The goal: to select a contractor that has all the capabilities required for producing high-quality products and services.

- competent, qualified, and sufficiently experienced personnel
- equipment and rolling stock that meet the requirements
- efficient quality-management procedures
- sufficient understanding and insight as to the nature of the contract and the content of the service
- a solid financial position, with access to sufficient financial resources

## 2. CLASSIFICATION OF CONTRACTS

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- A) **basic contracts** (42 out of 81 contracts at present)
- B) **complex contracts** (33 out of 81)
- C) **extremely complex contracts** (6 out of 81)

Based on: the total number of kilometres of road, the number of kilometres in each maintenance class, the kilometres of pedestrian and bicycle routes, and vehicle kilometres.

The categories differ in their requirements for:

1. financial position and resources
2. technical performance
3. contractors' work management
4. the action and quality plan





## 2. HOW THE ACTION AND QUALITY PLAN IS SCORED?

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1. Competence of personnel involved in the contract (in-house and subcontractors'), competence development, and management of information flow
2. Equipment and rolling stock, including accessories; measurement plans; locations of start points and storage facilities; and procurement of equipment, rolling stock, and materials
3. Accessibility plans, monitoring of road-network status, weather observations and road conditions' management, and initiation of measures and the related dissemination of information
4. Implementation and documentation of quality assurance for the contract, and serving of the road-users

30 %

30 %

20 %

20 %

### 3. QUALITY ASSURANCE DURING THE TERM OF CONTRACT

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- **Reviews:** initial review, meetings or joint road-network reviews before the beginning of each winter and summer road-maintenance season, annual mid-term review, the final acceptance inspection
- **Site meetings:** monthly
- **Audits:** once during the term of contract
- **Spot checks:**
  - The contractor is responsible for quality assurance
  - A supervisor appointed by the client carries out quality-control spot checks to test whether the contractor is up to the task
  - Also, consultants are used in spot checks, especially during the evenings, at night, and on weekends.



### **3. QUALITY ASSURANCE DURING THE TERM OF CONTRACT**

- **The client–contractor information system** for reporting on maintenance contracts
  - The contractor must have an electronic real-time monitoring system covering both the contractor’s own maintenance work and the tasks carried out by subcontractors. The client will have viewing rights to the contractor’s real-time maintenance-work monitoring system.
  - In the future with a map interface and systems for reporting on quality results and fulfilment of contract terms, for example.
- **Other quality-assurance methods and channels:**
  - road-maintenance customer-feedback system
  - centralised quality control of winter road maintenance (2001-2012)
  - a monitoring group composed of experienced professional drivers

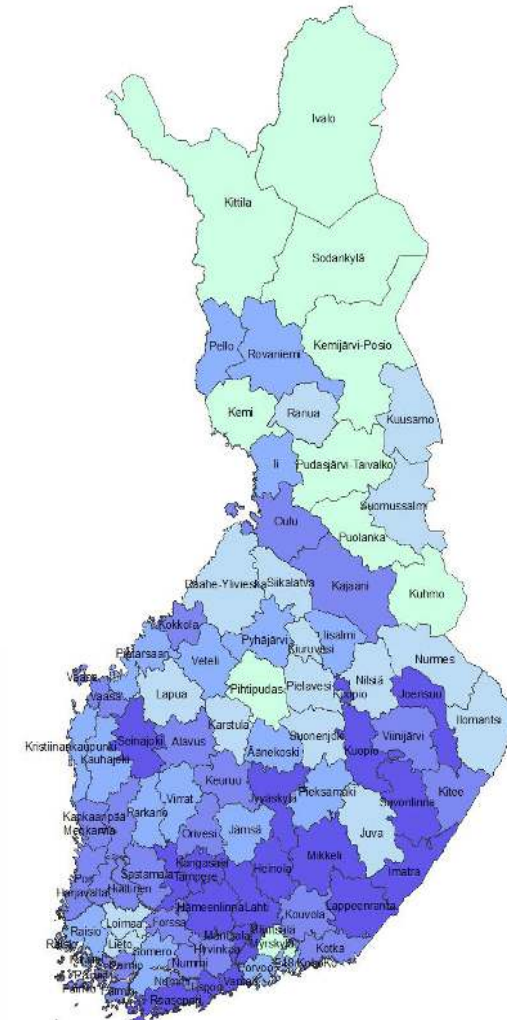
## 4. CUSTOMER PERSPECTIVE ON QUALITY

The primary goal of the winter maintenance of Finland's road network is to secure mobility and the flow and safety of commercial transport in any type of road conditions.

The client urges the contractor to provide the best possible service to customers.

A customer-satisfaction bonus is paid to the contractor for high or improved road-user satisfaction.

The amount of the bonus per contract is 0.4–2.0% of the annual costs of the contract.



## 5. THOUGHTS ON THE FUTURE

Do we receive the quality we have ordered? Not always.

Do we know when the quality ordered is not reached? Not always.

### What to develop?

- **contract content and payment criteria** (including the bonus and penalty systems)
- **clarity of quality requirements**
- **quality of client activities** (e.g. the competence requirements)
  - > guide toward the achievement of good quality
  - > indicators for expressing the existing quality and condition

# QUESTIONS?

**How do we assure that we get the quality we have ordered?**

Reference number: 0003

WORLDWIDE  
WORLDWIDE  
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**CONTENT**

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4. Thoughts on the future
5. Customer perspective on quality

**1. INTRODUCTION**

- 1.1 2013-2018 contract
- 1.2 1000 km contract
- 1.3 1000 km contract
- 1.4 1000 km contract
- 1.5 1000 km contract
- 1.6 1000 km contract
- 1.7 1000 km contract
- 1.8 1000 km contract
- 1.9 1000 km contract
- 1.10 1000 km contract

**2. QUALITY ASSURANCE DURING THE TENDERING PHASE**

- 2.1 Tendering process
- 2.2 Tendering process
- 2.3 Tendering process
- 2.4 Tendering process
- 2.5 Tendering process
- 2.6 Tendering process
- 2.7 Tendering process
- 2.8 Tendering process
- 2.9 Tendering process
- 2.10 Tendering process

**3. QUALITY ASSURANCE DURING THE TERM OF CONTRACT**

- 3.1 Quality assurance
- 3.2 Quality assurance
- 3.3 Quality assurance
- 3.4 Quality assurance
- 3.5 Quality assurance
- 3.6 Quality assurance
- 3.7 Quality assurance
- 3.8 Quality assurance
- 3.9 Quality assurance
- 3.10 Quality assurance

**4. THOUGHTS ON THE FUTURE**

- 4.1 Thoughts on the future
- 4.2 Thoughts on the future
- 4.3 Thoughts on the future
- 4.4 Thoughts on the future
- 4.5 Thoughts on the future
- 4.6 Thoughts on the future
- 4.7 Thoughts on the future
- 4.8 Thoughts on the future
- 4.9 Thoughts on the future
- 4.10 Thoughts on the future

**5. CUSTOMER PERSPECTIVE ON QUALITY**

- 5.1 Customer perspective
- 5.2 Customer perspective
- 5.3 Customer perspective
- 5.4 Customer perspective
- 5.5 Customer perspective
- 5.6 Customer perspective
- 5.7 Customer perspective
- 5.8 Customer perspective
- 5.9 Customer perspective
- 5.10 Customer perspective

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# THANK YOU!

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