

CORE BRIEF

Maintenance subcontracting in public transport networks

The present-day industry and company picture reveals a clear trend towards an increase in the amount of maintenance subcontracting. The public transport organisations that are member of the UITP Metro Division are no exception to this phenomenon.



RATP, Paris, France

The work conducted within the framework of the current study has involved 19 networks. The study outlines the recorded trend, identifies the reasons for subcontracting, and presents general recommendations.

The trend towards the subcontracting of maintenance activities crucially depends on the size and structure of the transport company. In subcontracting maintenance work on its installations, a company's primary motives are:

- **Size of current fleet**
When a fleet is small, in-house maintenance is not generally cost-effective since the required investment (industrial, staff training, spare-parts acquisition) is not justified.
- **Technological sophistication of installation**
Where technological evolution has been swift and does not form part of the company's basic culture, it may be more cost-effective to subcontract rather than to train in-house staff.
- **Cost**
The cost of subcontracting over an installation's life cycle should be compared with the full internal cost by making allowances for depreciation of installations, spare-parts acquisition, and staff and staff-training costs.

Three causes may justify subcontracting:

- **Administrative and regulatory**, as there are countries where the law requires that the periodic servicing of specific items of equipment be conducted by specialist firms approved by public administrations (for example, lifts, steam generators, pressurised equipment, etc.).

- **Strategic**, as in-house teams must be trimmed in some cases to handle constant workloads, thereby preventing them from absorbing peak demands.
- **Technological**, as maintenance subcontracting becomes necessary if the company lacks the qualified manpower with which it might carry out fully-guaranteed maintenance on certain items of equipment that match specific technologies.

The chief parameters taken into account when electing to subcontract are:

- Installation technology and complexity;
- Current fleet and number of items of equipment involved;
- Available staff;
- Staff qualifications and training necessary in order for them to handle certain types of specific installations;
- Political determination to support a company;
- Maintaining of company know-how.

The main tools available to an organisation in order to control the work of subcontractors are **costs and service quality**. This is because the main objective of public transport companies is to provide decent, uninterrupted service while minimising costs.



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In the event of subcontracting, both parties -- the subcontracting network and the subcontractor company -- face obligations

If subcontracting maintenance on an installation is deemed relevant, as far as possible this will need to be attended to during the commissioning stage. Subcontractors should be firms with extensive experience and sound finances. They should be capable of interpreting needs and of providing solutions to problems that occur. In order to enable firms to submit a suitable bid, they should be supplied with a full description of the product and of the service expected.

Recommendations for both parties

In order to generate a climate of mutual trust between the transport company and the subcontractor based on common aims and interests, the two parties must adhere to the following recommendations:

- During contract negotiations, the general framework for subcontracting relations should be defined on the basis of clear-cut, specific bases. Contractual clauses should also be determined.
- During the project's execution, a relationship of trust should be established between the different parties involved, as should independent and secure relations.

Recommendations for networks subcontracting maintenance work

As part of relations with the subcontractor, the transport company must:

- Provide all necessary information;
- Inspect the quality of the service or product supplied by the subcontractor;
- Ensure that information remains confidential;
- Settle invoices within a reasonable, predetermined time period;
- Participate (where necessary) in development activities and investments.

Recommendations for subcontracting firms

Subcontractors must:

- Carry out work in accordance with the contract;
- Uphold the confidentiality of the information obtained from the operating company;
- Offer advice and technical assistance;
- Keep up-to-date with technological changes.

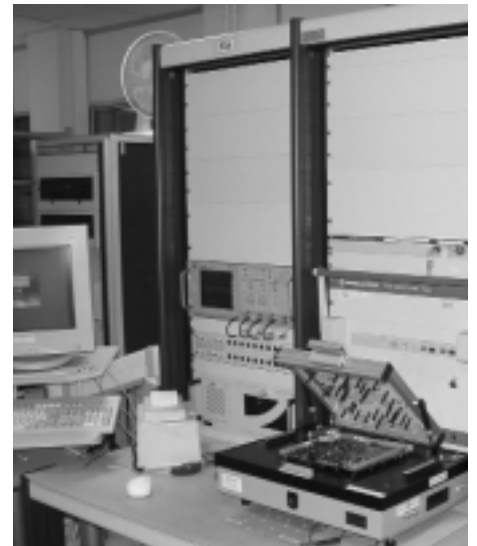
A particular aspect to be considered in relations between transport companies and subcontracting firms is that, although the firm is obliged to provide its personnel with the necessary training in terms of workplace risk prevention, this does not relieve the transport company of its responsibilities vis-à-vis those same personnel. For this reason, the transport company must ensure that the subcontractor adheres to all requirements laid down by Workplace Risk Prevention Regulations. Therefore, clauses should be included in the contract relating to coverage for civil liability arising from any accidents at work.

Similarly, environmental aspects stemming from subcontracted maintenance activities are the responsibility of the firm appointed to carry out inspections (usually the transport company). This responsibility should be established in the contract, which must set forth clearly the rules to be complied with.

Benefits of subcontracting

Subcontracting essentially provides the following advantages:

- Lower costs;
- Possibility of immediate access to specialised labour;
- Reduced training costs;
- Reduced costs linked to spare-part logistics;
- Facility of performing non-specific tasks at low cost;
- Flexibility in additional labour during periods of excess work loads;
- Possibility for the organisation to focus its efforts on the most productive tasks.



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Drawbacks of subcontracting

The primary disadvantages of subcontracting are:

- Possible complications as regards relations with subcontractors and other technical departments;
- Increased costs in some cases;
- Loss of know-how;
- Need to step up inspections;
- Disputes within the subcontractor (shutdowns, strikes, etc.) may have a knock-on effect on the service quality offered to the user from the metro network;
- Danger for the organisation of losing its capacity to perform maintenance via its own means, and for subcontractors of taking advantage of such a situation by increasing their prices.

Conclusion

There is no single answer to the problem of subcontracting. This is because the type, scale and volume of the subcontracted tasks vary considerably depending on the metro network, type of installation, and level of maintenance required. Overall, however, these are tending to increase or stabilise.

When drawing up contracts for the externalisation of maintenance, it is important to make allowances for the need to include aspects relative to workplace risk prevention and the environment.

This core brief has been prepared by the Electrical Installations and Safety Systems Subcommittee of the UITP Metro Division.