Annex 5

IT equipment: Bus radios, passenger counting system, ticketing equipment, and IT equipment

Technical specifications and other conditions regarding IT equipment

Introduction

This annex sets out the requirements and conditions for the IT equipment which must be installed in buses from the commencement of contract or during the contract period.

The annex initially states the general requirements and conditions which apply to all IT systems and IT equipment. Particular requirements for the respective part systems are specified thereafter.

IT-systems

IT-systems, which must be installed at the commencement of contract, include:

- Exterior destination signs (cf. requirements in Annex 4)
- · Loudspeaker system
- Bus radio (voice and data radio)
- Ticketing equipment (Almex-system)
- Passenger counting system (bus computer in a selection of tally buses)
- A-bus IT (all buses which serve A routes)

Planned IT systems, which are expected to be implemented during the contract period, include:

- Bus computer with an operating panel/display by the driver's seating area in all buses
- New ticketing system (Travel cards, possibly integrated with other IT equipment)
- Passenger display
- Equipment for active signal prioritisation

It will be stated in the Tender Terms and Conditions if IT equipment is only to be installed in selected buses.

1. General requirements for IT equipment

The below mentioned requirements apply to all IT equipment, unless otherwise indicated in Section 2 of this annex: "Additional requirements and conditions for IT systems that are employed from commencement of contract" or in Section 3 of this annex: "Requirements in connection with adjustments of existing and/or introduction of new IT systems."

Responsibility and organisation

Ownership

There are two formats – models – of ownership of the IT equipment which HUR requires installed in buses: A and B.

Model A:

HUR owns the IT equipment. HUR makes functional, operational and technical demands. HUR selects the supplier. HUR will cover the costs for all the IT components. The IT equipment must be returned to HUR at the termination of the contract period. HUR will cover the dismantling costs unless otherwise agreed.

Model B:

The contractor owns the IT equipment. HUR makes functional demands. The contractor is responsible for all technical and operational requirements, selects the supplier, and covers all costs for equipment, instalment as well as operation.

If, during the contract period, new IT systems or new functions in existing IT systems are either tested and/or implemented and put into operation, the ownership will be negotiated for each particular case.

The contractor is not permitted to sell or hire out buses and depots containing HUR-owned equipment (model A), without prior written approval from HUR. The contractor must make requests with at least 1 month's notice.

Responsibility for installation

For IT-equipment that HUR requires installed in the buses from the commencement of contract, all the contractor's expenses in connection with installation, set-up for tests and approval for operation, as well as delivery and installation of IT-cabinets, must be included in the tender price.

Installation comprises all physical work concerning the IT-cabinet, cf. the relative section about extending cables between the IT-cabinet and bus and IT components, as well as installation of aerials.

Unless otherwise agreed, HUR's IT supplier will deliver, install and connect all IT equipment to be installed in the IT cabinet. This also applies to the driver's terminal and passenger display, when relevant.

The IT supplier will ensure that the buses' IT equipment is tested and made ready for use. HUR will remunerate the IT supplier in connection with installation, connection and tests of the IT equipment in the IT cabinet.

It is the contractor's responsibility to correct any installation errors outside the IT cabinet. If any installation errors outside the IT cabinet are ascertained, the contractor is liable for all expenses for the repair of the fault, including any payments to HUR's IT supplier.

It is the contractor's responsibility to ensure that the buses fulfil all the technical and documented requirements which are necessary for the installation and subsequent operation of the required IT systems.

For Ownership A, the contractor must present a plan of operation for modification as well as delivery and testing of buses respectively, including installation of the required IT systems, no more than ½ year prior to commencement of operations, unless otherwise agreed. In connection with this, HUR requires that the contractor appoints a representative responsible for IT. This representative shall act as HUR's contact person for all questions concerning IT.

The contractor must make all buses available, free of charge, for the installation of IT equipment in the IT cabinet as well as for the testing and approval of the IT equipment, prior to commencement of services.

Failure to comply with the above deadlines will entitle HUR to apply sanctions, as stipulated in Annex 3.

Unless otherwise agreed, HUR will deliver all IT equipment, which is to be installed by the contractor, no later than 1 month before commencement of services.

HUR will cover all expenses for the installation of the IT equipment relating to the planned IT systems which HUR may decide to introduce after the

commencement of the contract. HUR will select the supplier.

Immediately after the termination of the contract, the contractor must ensure that the buses are made available for the dismantling of HUR's IT equipment. HUR will cover all expenses relating to the dismantling.

Should HUR require that the IT equipment is dismantled prior to the termination of the contract, and no agreements for such have been made, the costs related to any replacement buses required due to the dismantling will be agreed upon prior to commencement.