

Norway-Lier: Patient-monitoring system

OJ S 211/2015 30/10/2015

Contract notice

Services

Directive 2004/18/EC

Section I: Contracting authority

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**I.1. Name and addresses**

Official name: Lier kommune (Lier municipality)

Postal address: Vestsidenveien 2

Town: Lier

Postal code: 3401

Country: Norway

For the attention of: Ole Christian Jakobsen

E-mail: [ole.christian.jakobsen@lier.kommune.no](mailto:ole.christian.jakobsen@lier.kommune.no)

Telephone: +47 32220233

**Internet address(es):**

Electronic access to information: <http://permalink.mercell.com/52938713.aspx>

Electronic submission of tenders and requests to participate: <http://permalink.mercell.com/52938713.aspx>

**Additional information can be obtained from:**

Official name: Mercell Norge AS

Postal address: Karihaugveien 89

Town: Oslo

Postal code: 1086

Country: Norway

E-mail: [support@mercell.com](mailto:support@mercell.com)

Internet address: <http://permalink.mercell.com/52938713.aspx>

**Specifications and additional documents (including documents for competitive dialogue and a dynamic purchasing system) can be obtained from:**

Official name: Mercell Norge AS

Postal address: Karihaugveien 89

Town: Oslo

Postal code: 1086

Country: Norway

E-mail: [support@mercell.com](mailto:support@mercell.com)

Internet address: <http://permalink.mercell.com/52938713.aspx>

**Tenders or requests to participate must be submitted:** Official name: Mercell Norge AS

Postal address: Karihaugveien 89

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Country: Norway

E-mail: [support@mercell.com](mailto:support@mercell.com)

Internet address: <http://permalink.mercell.com/52938713.aspx>

**I.2. Type of the contracting authority**

Regional or local authority

### **I.3. Main activity**

General public services

### **I.4. Contract award on behalf of other contracting authorities**

The contracting authority is purchasing on behalf of other contracting authorities: no

## **Section II: Object of the contract**

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### **II.1. Description**

#### **II.1.1. Title attributed to the contract by the contracting authority**

Welfare technology platform for institutions.

#### **II.1.2. Type of contract and place of performance or delivery**

Services

Service category No 7: Computer and related services

Main site or place of performance: Lier municipality.

NUTS code NO032 Buskerud

#### **II.1.3. Information about a framework agreement or a dynamic purchasing system**

The procurement involves the establishment of a framework agreement

#### **II.1.4. Information about framework agreement**

Framework agreement with a single operator

##### **Duration of the framework agreement**

Duration in years: 4

##### **Estimated total value of purchases for the entire duration of the framework agreement**

Estimated value excluding VAT: 14 000 000 NOK

#### **II.1.5. Short description of the contract or purchase(s)**

Lier municipality shall procure and develop a general platform for welfare technology.

Lier municipality would like to establish a framework agreement with a main supplier who can help build a total platform for welfare technology for residential and rehabilitation institutions.

Simultaneously developing and adapting safety packages/systems and welfare technological aids on an open technological platform.

Welfare technological systems shall create security, wellbeing and self-help as well as enable social gatherings and increased activity.

The target group for the welfare technology is persons with dementia, as well as persons who require rehabilitation after falls, infections etc. The users' needs will vary; everything from being almost independent as regards daily activities to having a need for nursing and care for large parts of the day.

Fosshagen resource centre:

The nursing home, residences, daycentre and rehabilitation department at Fosshagen will be co-housed, with a total of 60 places. 32 nursing home places, 16 residence places and 12 rehabilitation places. Fosshagen shall be a resource centre for persons with dementia. The long term plan is to further develop the area with additional nursing home places/residences. The facilities at Fosshagen shall be a central place where users, employees and residents can meet.

Liertun and Nøstehagen nursing homes:

Lier municipality has two nursing homes in addition to Fosshagen: Liertun with 40 nursing home places and 26 residences and Nøstehagen with 22 nursing home places and 16 residences. These shall also have welfare technology and patient signalling systems installed.

The users at Nøstehagen er persons who have somatic illnesses, they also have a palliative unit. At Liertun there are somatic and cognitive failures in both the nursing home and in the residential department.

The contractor for Fosshagen has had tenders for patient signalling systems. The system has already been chosen. The chosen system will be delivered by Ascom. This system must be able to be integrated in the platform from the chosen supplier.

Localisation Housing form/Service Room/Residences Technology Comments:

Fosshagen nursing home, residence, rehabilitation department, daycentre, kitchen 60 Welfare technology Primary user group: Persons with dementia.

Nøstehagen and Liertun nursing homes and residences 104 Welfare technology Primary user group: Persons with dementia, somatics.

2. The purpose of the procurement:

The purpose of the procurement is:

Initial establishment of a joint communication platform for all welfare technology.

To develop safety packages/systems and other welfare technology in a collaboration with the main supplier and sub suppliers for both residences and institutions.

The contract is for the procurement of a system for new installations in new buildings and for renovations of existing buildings, as well as implementing existing systems.

Lier municipality currently has:

Visma Profil as the EPJ system in the entire municipality.

Nøstehagen: Patient signalling installations from Ing. Dahm og Bagle As, with their sensors (shall be replaced by the new system).

Frogner nursing home: Patient signalling systems from Ing. Dahm og Bagle As, with their sensors. Medicine cabinet from Health Tech. Mobile Profil on tablets.

Liertun: Old patient signalling installations that must be replaced, some sensors in patient rooms.

Bratromveien communal housing: Digital night monitoring from Arena helseinnovasjon.

Fosshagen: Ascom patient signalling system.

2.1. Result aims:

A joint framework agreement for safety signals and welfare technology in institutions with residences and rehabilitation.

Sub aims including;

The welfare technology at Fosshagen is to provide security and safety for users, relatives and employees.

Increased options for contact between the user, employee and relatives.

Increased self-help and life quality.

Increased quality of the nursing and welfare service; documentation, information, communication, self-help etc.

Facilitate simple and increased interaction between the hospital, nursing home, home help and nursing home doctor.

That persons with chronic illnesses can use tele medicine.

Contribute to entertainment and social gatherings.

2.2. Technology, standardisation and user driven development:

The welfare technology is currently an 'immature' area on both the supplier side and within the health and welfare sector. Most of the technology is available today, but it is far from being well adapted for users and having a good cost-benefit effect. There must be a lot of clarification before we have the correct combination of technology and standards for signal and information exchange, receipt, processing and standardised storage in an electronic patient journal and other administrative systems. New standardisations have appeared in 2015, CONTINUA and SCAIP. The Directorate of Health would like to use these and the

municipality would like suppliers to work with these standards. Visma Profil is used as the EPJ system in Lier and cooperation with this is essential.

The interaction between users, technology, services and the organisation must be matured and developed. There is a need here for innovation and development on several levels and between actors.

Links to the standards:

Link to the Continua standard: <https://helsedirektoratet.no/Lists/Publikasjoner/Attachments/832/Anbefaling-pa-valg-av-standarder-rammeverk-for-velferdsteknologi-IS-2200.pdf>

Link to the Scaip standard: <http://www.sis.se/h%C3%A4lso-och-sjukv%C3%A5rd/handikapph%C3%A4lpmedel/hj%C3%A4lpmedel-f%C3%B6r-personer-med-funktionsneds%C3%A4ttningar/ss-911002014>

### 3. Function description for the delivery:

The system shall be joint for the municipality's institutions and for users living at home.

The platform shall have central operations and it shall be scaleable for use in all the municipality's institutions and for all users living at home. Users who are in respite care/short stay visits at Fosshagen shall be able to use the same equipment at home as at Fosshagen. The existing systems shall be implemented in the platform.

The equipment and technological systems shall be standardised independent of whether the user lives in a house or institution. The user's needs and function level shall be guiding.

All equipment shall have a universal design and it shall be extendable for new products and changed needs.

All equipment shall have robustness that is adapted to the users and employees.

The system and products shall be user friendly and adapted to elderly persons with varying degrees of disabilities, including dementia, reduced sight, hearing, hand grip, balance.

Lier municipality shall have 24 hour user support and a service contract.

A contract for training employees/users/relatives shall be included in the delivery.

The equipment shall be able to be operated by personnel without special technical competence.

There shall be flexible signal processing in several reception centres, respondents, situation and time of the day/night. The administration for processing changes shall be simple.

Information that shall be recorded in the municipality's trade system and EPJ must be integrated.

The systems must be IP based.

#### 3.1. General functionality — communication

There shall be multi-touch terminals/TV (Smart TV with a touch screen) in all patient rooms. These TVs are already installed in Fosshagen. See point 3.3.

The internet, TV, communication, the employees'EPJ system shall be used for documentation. There shall be integration with the safety signal and welfare technology platform. Option for two-way communication.

The communication shall be simple, available and intuitive to use. The first priority is sound, but video shall also be possible.

The sense portal shall be available on the TV in the patient room, with an option for also using this in other areas.

#### 3.2 Monitoring and follow-up of health values:

The user and health personnel shall be able to check and follow-up health values via tele medicine. A direct integration and registration of health values on the user's 'electronic health card' or equivalent shall be possible on the municipality's EPJ system.

#### 3.3 General functionality — welfare technology:

The welfare technology shall have an open platform that shall be able to use the current and future technological systems. Individual adaptations shall be possible.

The technology shall contribute to processing:

- Falls;
- Cognitive failure;
- Health and nutrition;
- Localisation and tracing;
- Social contact;
- Communication.

The welfare technology at Fosshagen:

The number of units is described in the competition's product specification. The number of units is a best estimate and it can be altered by the contracting authority.

Sensors.

Movement — in and out. Lights turn themselves off/on.

Door and window — warning when the user opens the door/window, as well as when they approach the exit door.

There shall be a sort of 'door stopper', so that 1 user cannot get out, whilst another is free to come and go.

Bed — movement, bed wetting, epilepsy, other sensors.

Falls.

GPS/ Mobile safety alarm.

Calender/memo Planner.

Bicycle with a monitor for training and rehabilitation.

Tele medicine — Monitoring/treatment technology.

Sense portal inside via the TV screen/use of senses in the garden.

Robot shower in the rehabilitation department.

Robot technology.

Distraction technology — dementia.

Self-cleaning toilet/toilet ring.

Persons with dementia often require monitoring and special stimulants. A separate sense room is therefore planned.

There is a screened department connected to the nursing home, the technology here is to be individually adapted at all times.

Welfare technology at Nøstehagen and Liertun:

Sensors.

Movement — in and out. Lights turn themselves off/on.

Door and window — warning when the user opens the door/window, as well as when they approach the exit door.

There shall be a sort of 'door stopper', so that one user cannot get out, whilst another is free to come and go.

Bed — movement, bed wetting, epilepsy, other sensors.

Falls.

GPS / Mobile safety alarm.

Calender/memo Planner.

Sense portal inside via the TV screen/use of senses in the garden.

Bicycle with a monitor for training and rehabilitation.

Smart tv with touch — see above for the wanted use.

Patient signalling installations — these shall fulfil the same requirements as at Fosshagen.

See the link <http://81.167.194.46/upload/Vei%20og%20trafikk/Nytt%20sykehjem/Anbudsdokumenter/Beskrivelse/Teknisk%20beskrivelse%20Frognerhagen%20-%20Rev%20B.pdf>

We would like 1 platform for the municipality. One joint contract for operation, service, training and follow-up and further expansions.

### 3.5. Receipt and follow-up:

The platform shall have central operations, but all signal processing and communication shall be flexible as regards processing, organisation, reception centres, type of equipment and different needs at different times of the day.

It shall be easy for our super users to configure the system. Local control in the event of electricity or data cuts.

Different types of calls and signals must be able to go to different places independent of organisation and the type of signal. The registration of a health value, via a sensor, shall send the signals straight to the user's journal.

The system shall be easy to use and manageable in the event of changes by local super users such as:

Terminal configurations, set up of warning loops and groups. Change of room number via software, so that moving rooms between departments can be done without any physical change in the installation.

Changing texts, prioritising different signal types, connecting departments shall be programmable in software.

Use of statistics and log functionality. Logging shall enable the extraction of historical data to a standard reporting tool.

### 4. Existing ICT platform.

ServerOS: Windows 2008R2 or more recent.

Virtualisation platform: VMWare.

Citrix Terminal server.

Domains PC: Windows 7 or more recent.

Preferred internet reader: Internet Explorer.

Profile, but must be able to interact with the EPJ system that Lier municipality has at any one time.

### 4.1 Network and infrastructure.

The procurement includes many different elements and the use of Lier municipality's systems is a prerequisite.

### 4.2. Marking system:

It is important to have uniform marking and documentation in accordance with the standard so that Lier municipality shall be able to administer the systems. The marking and naming in monitor pictures shall coincide with the marking and naming in the system and in all documentation that describes the owner's marking structure/markings system.

The server must be able to be programmed with a sufficient number of characters in accordance with the project's marking structure.

### 4.3. Integrations.

In order to achieve a general system for welfare technology, the different systems must be able to be integrated through the use of a joint technical platform and/or gateways for information exchange. A central part of the procurement is the suppliers' systems for this.

#### 4.3.1. EPJ system:

The Ministry of Health and Care Services' guidelines for standardisation and coordination of information and communication systems in the health service will apply. The new standard is Continua. Information that is to be recorded in journal shall be able to be integrated with this standard. The format requirements are included as a part of the pilot project. Suppliers are obliged to enter into a binding cooperation with the municipality's EPJ supplier.

### 4.4. Synchronisation:

All prioritised systems are to be connected to a central operations server for the same

synchronisation of, amongst other things, time.

#### 4.5. Competence and training:

An agreement must be made for training for each unit and institution.

#### 4.6. Documentation

The system shall be delivered with documentation. The preferred language is Norwegian.

#### 4.7. Status meetings and reports:

The municipality will hold a minimum of biannual meetings with the supplier in order to review how the framework agreement is functioning. In these meetings status and a review of plans for the budget periods, amongst other things, will be a fixed agenda.

The supplier shall submit monthly reports to the contracting authority. These are to be submitted by the first Friday of the following month.

See the attached report format.

The supplier shall be present at 2 reviews of project deliveries, meetings/evaluations per annum.

#### 5. Extent and length of the contract:

Lier municipality would like a 2 year framework agreement with the supplier with an option for a further 1 + 1 year, for the delivery of the platform and installations for safety signals as well as welfare technology, equipment deliveries and the accompanying services for installation, integration, operation, support, documentation, training and service of the platform.

##### 5.1 Call-offs on the framework agreement

Call-offs shall be made on the framework agreement in accordance with:

The development of the central operations platform with infrastructure.

New nursing home, with the accompanying communal rooms and sanitary facilities.

##### 5.2 Development contract:

A development contract is wanted with the supplier We would also like permanent representation in the supplier's 'users board' that will ensure Lier municipality the possibility to influence the supplier's development of the products.

##### 5.3 The supplier's coordination role towards its sub suppliers and delivery responsibility to the contracting authority:

The supplier is allowed to use sub suppliers, these shall be listed in the document 'Approved Sub Suppliers' Annex no 05

If new sub suppliers are included during the contract period, they shall be approved by the contracting authority and registered in the 'Approved Sub Suppliers' Annex no 05, which shall be continually updated.

If a sub supplier's shortcoming/wrong delivery causes the supplier's delivery to be delayed, the contracting authority can demand that the sub supplier is replaced by a sub supplier that fulfils the contracting authority's and the supplier's requirements. Any costs in this process are to be borne by the supplier.

The supplier shall coordinate all contact with sub suppliers and shall be the responsible point of contact for the contracting authority. The contracting authority will not accept interface and coordination functions with sub suppliers unless approved by the contracting authority.

The supplier and sub suppliers shall submit a signed 'Self-declaration for wage and work terms' — this is ensure that all the supplier's and sub suppliers' employees and contractors work in accordance with the current provisions for wages and work terms. These forms shall be collected and submitted together as an annex to the tender. The form shall be filled in if new sub suppliers are added to the project.

The Contracting Authority uses Mercell Sourcing Service. To express your interest and gain access to any documents, please click on the link below or copy and paste the link into your browser. (<http://permalink.mercell.com/52938713.aspx>). Then follow the instructions on the website.

#### **II.1.6. CPV code(s)**

33195000 Patient-monitoring system, 30200000 Computer equipment and supplies, 30231320 Touch screen monitors, 30232700 Central controlling unit, 31682500 Emergency electricity equipment, 31710000 Electronic equipment, 32260000 Data-transmission equipment, 32321200 Audio-visual equipment, 32323500 Video-surveillance system, 32570000 Communications equipment, 32581000 Data-communications equipment, 33196000 Medical aids, 33196100 Devices for the elderly, 33196200 Devices for the disabled, 35100000 Emergency and security equipment, 35121000 Security equipment, 35121100 Buzzers, 35125100 Sensors, 38570000 Regulating and controlling instruments and apparatus, 48921000 Automation system

#### **II.1.7. Information about the Government Procurement Agreement (GPA)**

The procurement is covered by the Government Procurement Agreement: no

#### **II.1.8. Lots**

This contract is divided into lots: no

#### **II.1.9. Information about variants**

Variants will be accepted: no

### **II.2. Scope of the procurement**

#### **II.2.1. Total quantity or scope**

Estimated value excluding VAT: 14 000 000 NOK

#### **II.2.2. Information about options**

Options: no

#### **II.2.3. Information about renewals**

This contract is subject to renewal: no

### **II.3. Duration of the contract or time limit for completion**

Start 1.2.2016. Completion 1.2.2020

## **Section III: Legal, economic, financial and technical information**

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### **III.1. Conditions related to the contract**

#### **III.1.1. Deposits and guarantees required**

#### **III.1.2. Main financing conditions and payment arrangements and/or reference to the relevant provisions governing them**

#### **III.1.3. Legal form to be taken by the group of economic operators to whom the contract is to be awarded**

#### **III.1.4. Contract performance conditions**

The performance of the contract is subject to particular conditions: no

### **III.2. Conditions for participation**

#### **III.2.1. Suitability to pursue the professional activity, including requirements relating to enrolment on professional or trade registers**

List and brief description of conditions: Tax certificate — Requirement: Tenderers must have submitted their tax assessments and paid tax and employer contributions. Documented by:

Tax certificate. The certificate shall not be older than 6 months, calculated from the deadline for receipt of tenders. Any arrears or other irregularities must be justified. If the tenderer is planning to use sub-suppliers, tax certificates must be provided for them as well.

VAT certificate — Requirement: Tenderers must have submitted their VAT assessments and paid VAT. Documented by: VAT certificate. The certificate shall not be older than 6 months, calculated from the deadline for receipt of tenders. Any arrears or other irregularities must be justified. If the tenderer is planning to use sub-suppliers, tax certificates for VAT must be provided for them as well.

Company Registration Certificate — Requirement: Tenderers shall be a legally established company, this also applies to any sub-suppliers. Documentation: Company Registration Certificate or equivalent from the tenderer's home country.

HSE self-declaration — Requirement: The tenderer shall vouch that the company operates systematically to fulfil the requirements of health, safety and environment legislation and that they satisfy internal regulations. The tenderer must also confirm that the company is legally organised in relation to applicable tax and working environment regulations for employees' professional and social rights, and shall accept that the contracting authority has the right to review and verify the company's system for safeguarding health, safety and environment.

Documentation: A signed HSE self-declaration

Wages and working conditions. Requirement: Tenderer shall have read, understood and accepted the Wages and working conditions. Documented by: Signed Wages and working conditions.

Binding statement. Requirement: Tenderer shall have jurisdiction over any sub-suppliers.

Documented by: A signed binding statement if sub-suppliers are utilised.

General Purchasing Terms. Requirement: Tenderer shall have read, understood and accepted Lier municipality's general purchasing terms. Documented by: Annex 03 Signed Acceptance Form for general purchasing terms.

### **III.2.2. Economic and financial ability**

List and brief description of conditions: The applicant shall have a credit rating of at least A /AN. Lier municipality will obtain this information from Bisnode (previously AAA Soliditet AS) in weeks 51-52.

### **III.2.3. Technical and professional ability**

List and brief description of conditions:

Tenderers shall have experience from a minimum of three equivalent assignments.

Documented by: Short description of 3 equivalent previously carried out contracts.

Overview of the tenderer's staffing.

### **III.2.4. Information about reserved contracts**

#### **III.3. Conditions specific to services contracts**

##### **III.3.1. Information about a particular profession**

Execution of the service is reserved to a particular profession: no

##### **III.3.2. Information about staff responsible for the performance of the contract**

Obligation to indicate the names and professional qualifications of the staff assigned to performing the contract: no

## **Section IV: Procedure**

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### **IV.1. Type of procedure**

#### **IV.1.1. Type of procedure**

Open

#### **IV.1.2. Information about the limits on the number of candidates to be invited**

#### **IV.1.3. Information about reduction of the number of solutions or tenders during negotiation or dialogue**

#### **IV.2. Award criteria**

##### **IV.2.1. Award criteria**

The most economically advantageous tender in terms of Criteria below

1. Price. Weighting 70
2. Quality. Weighting 30

##### **IV.2.2. Information about electronic auction**

An electronic auction will be used: no

#### **IV.3. Administrative information**

##### **IV.3.1. File reference number attributed by the contracting authority**

2015/4589

##### **IV.3.2. Previous publication concerning this procedure**

no

##### **IV.3.3. Conditions for obtaining specifications and additional documents or descriptive document**

Time limit for receipt of requests for documents or for accessing documents: 8.12.2015 - 12:00

Payable documents: no

##### **IV.3.4. Time limit for receipt of tenders or requests to participate**

15.12.2015 - 12:00

##### **IV.3.5. Estimated date of dispatch of invitations to tender or to participate to selected candidates**

##### **IV.3.6. Languages in which tenders or requests to participate may be submitted**

Other: Norwegian.

##### **IV.3.7. Minimum time frame during which the tenderer must maintain the tender**

until: 15.3.2016

##### **IV.3.8. Conditions for opening of tenders**

Date: 15.12.2015 - 14:00

Place:

Lier Town Hall.

Persons authorised to be present at the opening of tenders: no

#### **Section VI: Complementary information**

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##### **VI.1. Information about recurrence**

This is a recurrent procurement: no

##### **VI.2. Information about European Union funds**

The procurement is related to a project and/or programme financed by European Union funds:  
no

**VI.3. Additional information**

**VI.4. Procedures for review**

**VI.4.1. Review body**

**VI.4.2. Review procedure**

**VI.4.3. Service from which information about the review procedure may be obtained**

**VI.5. Date of dispatch of this notice**

28.10.2015