

842076-2025 - Resultater

Danmark – Simulatorer til forskning, prøvning eller teknisk-videnskabelig brug – Robotic transporter system

OJ S 244/2025 18/12/2025

Bekendtgørelse om indgåede kontrakter eller koncessionstildeling – standardordningen
Varer

1. Køber

1.1. Køber

Officielt navn: Syddansk Universitet

E-mail: cap@sdu.dk

Køberens retlige status: Offentligretligt organ

Den ordregivende myndigheds aktivitet: Uddannelse

2. Procedure

2.1. Procedure

Titel: Robotic transporter system

Beskrivelse: The robotic transporter system will serve a highly specialized purpose, which is required to be designed, manufactured, assembled, deployed, commissioned and maintained in the context of a globally unique scientific facility for testing and experimentation. Due to radiation, breeding blankets (BB) in fusion reactors require maintenance via remote handling (RH). SDU's BB RH Facility will consist of a building in which the robotic transporter system will be located in 20 m height to test and experiment with the lifting of two individual BB mock-ups along a complex trajectory in position and orientation through a porthole, where each BB mock-up weighs max. 90 t (parameterizable), features complex geometries, highly acentric COG, unspecified flexibilities, and side-forces from point and surface contacts surrounding the BBs. To meet these requirements, the design of the robotic transporter system was initially developed in scientific simulations by various international teams and then refined by SDU in conjunction with the design of the overall BB RH Facility. Technical specification. The robotic transporter system will have 7 independent degrees of freedom (see operational joint velocities and joint accelerations below), a height of 7,1 m from base to TCP, a length x depth of 5,8 m x 3,1 m to travel above the BB mock-ups resp. the porthole. Machine interfaces. To allow for testing and experimentation of various control architectures according to the mission of the BB RH Facility, the robotic transporter system must be equipped with the following interfaces. Documented experience with designing for motors, sensors, and cabling by external parties is thus requested, as well as documented experience with designing for computerized machine interfaces (actuators, sensors) by external parties. -Motor interfaces. Interfaces for electric motor control systems, to parameterize, monitor and control the operation of each joint performance in real-time, matching the motor hardware which will be selected and (in parts) contributed by SDU in close dialogue with the supplier. -Sensor interfaces. Interfaces for various sensor systems, to monitor the state of the robotic transporter systems in real-time, including (but not limited to) torque sensors, strain gauges, accelerometers, matching the sensor hardware which will be selected and (in parts) contributed by SDU in close dialogue with the supplier. -Monitoring interfaces. Interfaces to instrumentation required for diagnostics and validation, i.e. monitoring and control of the overall system state and system health, matching the monitoring hardware which will be

selected and (in parts) contributed by SDU in close dialogue with the supplier. Additional technical requirements include: -Prismatic joint. The first joint of the robotic transporter system must be executed as a highly durable, low friction, dry, sliding prismatic joint to ensure the required accuracy of the robotic operation. Documented experience with low-friction, dry, sliding prismatic joints is thus requested. -Corrosion protection. All elements of the robotic transporter system must be painted/sealed to protect against the maritime environment of the location of the BB RH Facility at a port. Documented experience with steel welding and corrosion protection of maritime structures is thus requested. -UPS. The robotic transporter system must include emergency breaks and uninterruptable power supply (UPS) to ensure safe recovery in case of unexpected power outage. Documented experience with uninterruptable power supplies and failsafe brake systems is thus requested. Redesign. According to SDU's refined design, the supplier will further redesign the robotic transporter system for i) manufacturing to ensure all links and joints (motors and gears) can be supplied, supported, machined, assembled and connected; ii) safe and robust operation to ensure the robotic transporter system can operate consistently within the given application requirements and operational specifications; iii) long-term maintenance to ensure all links and joints (motors and gears) are accessible for maintenance, repair and exchange.

Identifikator for proceduren: 513fbb94-e74e-4219-a359-b6cf202aa083

Tidligere bekendtgørelse: 801956-2025

Intern ID: 614642

Udbudsprocedure: Udbud med forhandling uden forudgående offentliggørelse

2.1.1. Formål

Kontraktens hovedformål: Varer

Primær klassifikation (cpv): 38970000 Simulatorer til forskning, prøvning eller teknisk-videnskabelig brug

Supplerende klassifikation (cpv): 42997300 Industrirobotter, 38000000 Laboratorieudstyr, optisk udstyr og præcisionsudstyr (ikke briller)

2.1.2. Udførelsessted

Landsdel (NUTS): Fyn (DK031)

Land: Danmark

2.1.4. Generelle oplysninger

Yderligere oplysninger: Market situation. Since SDU first planned the BB RH Facility in 2024, periodic market research yielded that several potential suppliers for the engineering of the robotic transporter system are available in the market. However, out of the available potential suppliers, only one supplier is able to meet all the following requirements: i) offer all stages of design, manufacturing, assembly, deployment, commissioning and maintenance ii) within a single company, iii) with a documented portfolio of reference installations, iv) particularly of highly durable, low friction, dry, sliding prismatic joints and v) corrosion protection in maritime environments, and vi) with the immediate presence in case of emergencies, which leaves SH Group as the only supplier with the proven experience and know-how of addressing all application requirements and specifications as requested. The possibility that any other supplier could deliver the same in full has been objectively excluded through market consultations

Retsgrundlag:

Direktiv 2014/24/EU

5. Delkontrakt

5.1. Delkontrakt: LOT-0000

Titel: Robotic transporter system

Beskrivelse: The robotic transporter system will serve a highly specialized purpose, which is required to be designed, manufactured, assembled, deployed, commissioned and maintained in the context of a globally unique scientific facility for testing and experimentation. Due to radiation, breeding blankets (BB) in fusion reactors require maintenance via remote handling (RH). SDU's BB RH Facility will consist of a building in which the robotic transporter system will be located in 20 m height to test and experiment with the lifting of two individual BB mock-ups along a complex trajectory in position and orientation through a porthole, where each BB mock-up weighs max. 90 t (parameterizable), features complex geometries, highly acentric COG, unspecified flexibilities, and side-forces from point and surface contacts surrounding the BBs. To meet these requirements, the design of the robotic transporter system was initially developed in scientific simulations by various international teams and then refined by SDU in conjunction with the design of the overall BB RH Facility. Technical specification. The robotic transporter system will have 7 independent degrees of freedom (see operational joint velocities and joint accelerations below), a height of 7,1 m from base to TCP, a length x depth of 5,8 m x 3,1 m to travel above the BB mock-ups resp. the porthole. Machine interfaces. To allow for testing and experimentation of various control architectures according to the mission of the BB RH Facility, the robotic transporter system must be equipped with the following interfaces. Documented experience with designing for motors, sensors, and cabling by external parties is thus requested, as well as documented experience with designing for computerized machine interfaces (actuators, sensors) by external parties. -Motor interfaces. Interfaces for electric motor control systems, to parameterize, monitor and control the operation of each joint performance in real-time, matching the motor hardware which will be selected and (in parts) contributed by SDU in close dialogue with the supplier. -Sensor interfaces. Interfaces for various sensor systems, to monitor the state of the robotic transporter systems in real-time, including (but not limited to) torque sensors, strain gauges, accelerometers, matching the sensor hardware which will be selected and (in parts) contributed by SDU in close dialogue with the supplier. -Monitoring interfaces. Interfaces to instrumentation required for diagnostics and validation, i.e. monitoring and control of the overall system state and system health, matching the monitoring hardware which will be selected and (in parts) contributed by SDU in close dialogue with the supplier. Additional technical requirements include: -Prismatic joint. The first joint of the robotic transporter system must be executed as a highly durable, low friction, dry, sliding prismatic joint to ensure the required accuracy of the robotic operation. Documented experience with low-friction, dry, sliding prismatic joints is this requested. -Corrosion protection. All elements of the robotic transporter system must be painted/sealed to protect against the maritime environment of the location of the BB RH Facility at a port. Documented experience with steel welding and corrosion protection of maritime structures is thus requested. -UPS. The robotic transporter system must include emergency breaks and uninterruptable power supply (UPS) to ensure safe recovery in case of unexpected power outage. Documented experience with uninterruptable power supplies and failsafe brake systems is thus requested. Redesign. According to SDU's refined design, the supplier will further redesign the robotic transporter system for i) manufacturing to ensure all links and joints (motors and gears) can be supplied, supported, machined, assembled and connected; ii) safe and robust operation to ensure the robotic transporter system can operate consistently within the given application requirements and operational specifications; iii) long-term maintenance to ensure all links and joints (motors and gears) are accessible for maintenance, repair and exchange.

Intern ID: 614642

5.1.1. Formål

Kontraktens hovedformål: Varer

Primær klassifikation (cpv): 38970000 Simulatorer til forskning, prøvning eller teknisk-videnskabelig brug

Supplerende klassifikation (cpv): 42997300 Industrirobotter, 38000000 Laboratorieudstyr, optisk udstyr og præcisionsudstyr (ikke briller)

5.1.2. Udførelsessted

Landsdel (NUTS): Fyn (DK031)

Land: Danmark

5.1.3. Anslået varighed

Startdato: 15/12/2025

5.1.4. Fornyelse

Højeste antal fornyelser: 0

5.1.6. Generelle oplysninger

Indkøbsprojekt, der ikke finansieres med EU-midler

Udbuddet er omfattet af aftalen om offentlige udbud (GPA): ja

5.1.10. Tildelingskriterier

Kriterium:

Type: Pris

Beskrivelse: Pris

Kategori for tildelingskriteriet vægt: Vægtning (procentdel, præcis)

Tildelingskriterium talværdi: 100

5.1.15. Teknikker

Rammeaftale:

Ingen rammeaftale

Oplysninger om det dynamiske indkøbssystem:

Intet dynamisk indkøbssystem

5.1.16. Yderligere oplysninger, mægling og gennemgang

Organisation med ansvar for klager: Danish Complaints Board for Public Procurement

Oplysninger om klagefrister: According to the Danish Complaints Board for Public

Procurement Act etc. (the Act can be downloaded at www.retsinformation.dk), the following deadlines for filing a complaint apply: Complaints about not having been selected must be submitted to the Danish Complaints Board for Public Procurement within 20 calendar days, cf. Section 7(1) of the Act, from the day after sending a notification to the candidates concerned about who has been selected, when the notification is accompanied by a statement of reasons for the decision in accordance with Section 2(1)(1) of the Act and Section 171(2) of the Public Procurement Act. In other situations, complaints about tenders, cf. Section 7(2) of the Act, must be submitted to the Complaints Board for Public Procurement within: 1) 45 calendar days after the contracting entity has published a notice in the Official Journal of the European Union that it has entered into a contract. The deadline is calculated from the day after the date on which the announcement has been published. 2) 20 calendar days from the day after the contracting entity has announced its decision, cf. Section 185(2) of the Public Procurement Act. No later than the same time that a complaint is submitted to the Complaints Board for Public Procurement, the complainant must inform the contracting entity in writing that a complaint is submitted to the Complaints Board for Public Procurement and whether the

complaint has been submitted during the standstill period, cf. Section 6(4) of the Act. In cases where the complaint has not been submitted during the standstill period, the complainant must also state whether the complaint is to be given suspensive effect, cf. Section 12(1) of the Act. The Complaints Board for Public Procurement's e-mail address is stated in Section VI.4.1). The Complaints Board for Public Procurement's complaint guide can be found at: www.erhvervsstyrelsen.dk.

Organisation, der leverer supplerende oplysninger om udbudsproceduren: Syddansk Universitet

Organisation, der leverer yderligere oplysninger om klageprocedurerne: Danish Competition and Consumer Authority

6. Resultater

Værdien af alle kontrakter tildelt i denne bekendtgørelse: 9 372 057,00 DKK

Direkte tildeling

:

Begrundelse for direkte tildeling: Kontrakten kan kun tildeles af en bestemt økonomisk aktør på grund af manglende konkurrence af tekniske årsager

Anden begrundelse: § 80, litra 3 and litra 4– Only one supplier

6.1. Resultat delkontrakt-ID: LOT-0000

Status for udvælgelse af vinder: Der er udvalgt mindst én vinder.

6.1.2. Oplysninger om vinderne

Vinder:

Officielt navn: SH GROUP A/S

Tilbud:

Tilbud – Identifikator: 106411

ID for delkontrakt eller gruppe af delkontrakter: LOT-0000

Værdien af tilbuddet: 9 372 057,00 DKK

Underentreprise: Nej

Kontraktoplysninger:

Identifikator for kontrakten: 106411

Titel: Robotic transporter system / SH GROUP A/S

6.1.4. Statistiske oplysninger

Modtagne tilbud og ansøgninger om deltagelse:

Type modtagne indgivelser: Tilbud

Antal modtagne tilbud og ansøgninger om deltagelse: 0

8. Organisationer

8.1. ORG-0001

Officielt navn: Syddansk Universitet

Registreringsnummer: 29283958

Postadresse: Campusvej 55

By: Odense M

Postnummer: 5230

Landsdel (NUTS): Fyn (DK031)

Land: Danmark

Enhed: Cindie Arendal Petersen

E-mail: cap@sdu.dk

Telefon: 65509297

Internetadresse: <https://www.sdu.dk/>

Denne organisations roller:

Køber

Organisation, der leverer supplerende oplysninger om udbudsproceduren

8.1. ORG-1000

Officielt navn: Comdia ApS

Registreringsnummer: 33501404

Postadresse: Lindvedvej 73

By: Odense S

Postnummer: 5260

Landsdel (NUTS): Fyn (DK031)

Land: Danmark

E-mail: support@comdia.com

Telefon: +45 7199 3672

Internetadresse: <https://www.comdia.com/>

Denne organisations roller:

TED eSender

8.1. ORG-1001

Officielt navn: Danish Complaints Board for Public Procurement

Registreringsnummer: 37795526

Postadresse: Danish Appeals Boards Authority, Toldboden 2

By: Viborg

Postnummer: 8800

Landsdel (NUTS): Vestjylland (DK041)

Land: Danmark

E-mail: klfu@naevneneshus.dk

Telefon: +45 7240 5600

Internetadresse: <http://www.klfu.dk>

Denne organisations roller:

Organisation med ansvar for klager

8.1. ORG-1002

Officielt navn: Danish Competition and Consumer Authority

Registreringsnummer: 10294819

Postadresse: Carl Jacobsens Vej 35

By: Valby

Postnummer: 2500

Landsdel (NUTS): Københavns omegn (DK012)

Land: Danmark

E-mail: kfst@kfst.dk

Telefon: +45 4171 5000

Internetadresse: <https://www.kfst.dk/>

Denne organisations roller:

Organisation, der leverer yderligere oplysninger om klageprocedurerne

8.1. ORG-0002

Officielt navn: SH GROUP A/S

Den økonomiske operatørs størrelse: Stor virksomhed

Registreringsnummer: 12762704

Postadresse: Kuopiovej 20

By: Svendborg

Postnummer: 5700

Landsdel (NUTS): Fyn (DK031)

Land: Danmark

E-mail: sh@shgroup.dk

Telefon: 62217810

Denne organisations roller:

Tilbudsgiver

Vinder af disse delkontrakter: LOT-0000

Oplysninger om bekendtgørelsen

Bekendtgørelsens ID: 96027b22-5451-41aa-9c6b-11334dbca077 - 01

Formulartype: Resultater

Bekendtgørelsestype: Bekendtgørelse om indgåede kontrakter eller koncessionstildeling – standardordningen

Bekendtgørelsesundertype: 29

Afsendelsesdato for bekendtgørelsen: 17/12/2025 08:47:09 (UTC+01:00) centraleuropæisk tid, vesteuropæisk sommertid

Bekendtgørelsens officielle sprog: engelsk

Bekendtgørelsesnummer: 842076-2025

EUT-S-nummer: 244/2025

Offentliggørelsesdato: 18/12/2025