1. Buyer

1.1 Buyer

Official name:	Universiteit Twente

2. Procedure

2.1 Procedure

Title:	High-resolution, high-speed, low-noise camera
Description:	UT takes the position that the contract can be awarded directly to Acal BFi due to the absence of competition for technical reasons within the meaning of Article 2.32 paragraph 1 sub b bullet 2 Public Procurement Act 2012. According to UT, there is also no reasonable alternative or substitute within the meaning of Article 2.32 paragraph 3 Public Procurement Act 2012 that can meet the reasonable requirements of UT, as stated below: Requirements -The camera should have at least 1.3 megapixel resolution (1280*1024) such that a large number of length-scales can be resolved. -The camera should have at least 31kfps recording rate at full resolution (with global shutter such as to prevent rolling shutter), and should be able to also increase frame-rate for reduced FOV experiments where even faster time-scales needs to be resolved though at the cost of resolution. -The camera should have a temporal dark noise of 7e- or better. -High sensitivity with low noise (ISO 40000 or higher and a quantum-efficiency of 57% or better) such that a relatively small amount of light can be used to observe high-speed events (existing infrastructure includes a high-speed laser for illumination). -12 bit recording mode such that the flow and details can be recorded with large dynamic range (the combination of low temporal noise, high sensitivity ensures that at high speeds clean recordings can be made of tiny (fluorescent) tracer particles with minimal light). -The camera should have a F and C mount such as to be compatible with existing optics. -The camera should have 3/8-16 UNC (tripod thread) and M4, M5, M6, or M8 mounting screws on the body to rigidly install the device in our setups. -The size of the camera should be limited to 300 mm * 200 mm * 200 mm such that is fits in our set-ups. -The camera should be monochrome without any Bayer filter (to minimize light loss). -The camera should be able to operate between 0–30 degrees Celsius (high room temperatures and down to zero for use inside a cold room). -The camera should have a large memory (more than 100GB) such that long recordings can be made (needed to resolve long-time statistics and to capture rare events that are more common in turbulence than one would expect from normally-distributed events). -The camera should have a variety of input and output signals to trigger and operate it with external hardware (lasers, function generators, trigger-boxes etc): TTL, Sync in/out, SW IN. -The camera should use USB-C or ethernet connection to download the images from the software. -The camera should be compatible with the PFV4 software such that it can operate with existing hardware infrastructure and that the cameras can be programmed and operated using the same software, including doing image calibration to reprogram the CMOS chip to remove noise (“black calibration” or “shading calibration”).
Procedure identifier:	df15dbb4-8750-45ad-9789-0d0d66ca145a
Internal identifier:	a05780a1-ca30-4cfa-92cc-2a7af2013410
Type of procedure:	Negotiated without prior call for competition

2.1.1 Purpose

Main nature of the contract:	Supplies
Main classification (cpv):	38000000 Laboratory, optical and precision equipments (excl. glasses)

2.1.2 Place of performance

Country:	Netherlands

Anywhere in the given country

Additional information:	Zie documentatie

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2.1.4 General information

Legal basis:

Directive 2014/24/EU

5. Lot

5.1 Lot technical ID: LOT-0000

Title: High-resolution, high-speed, low-noise camera

Description: UT takes the position that the contract can be awarded directly to Acal BFi due to the absence of competition for technical reasons within the meaning of Article 2.32 paragraph 1 sub b bullet 2 Public Procurement Act 2012. According to UT, there is also no reasonable alternative or substitute within the meaning of Article 2.32 paragraph 3 Public Procurement Act 2012 that can meet the reasonable requirements of UT, as stated below: Requirements -The camera should have at least 1.3 megapixel resolution (1280*1024) such that a large number of length-scales can be resolved. -The camera should have at least 31kfps recording rate at full resolution (with global shutter such as to prevent rolling shutter), and should be able to also increase frame-rate for reduced FOV experiments where even faster time-scales needs to be resolved though at the cost of resolution. -The camera should have a temporal dark noise of 7e- or better. -High sensitivity with low noise (ISO 40000 or higher and a quantum-efficiency of 57% or better) such that a relatively small amount of light can be used to observe high-speed events (existing infrastructure includes a high-speed laser for illumination). -12 bit recording mode such that the flow and details can be recorded with large dynamic range (the combination of low temporal noise, high sensitivity ensures that at high speeds clean recordings can be made of tiny (fluorescent) tracer particles with minimal light). -The camera should have a F and C mount such as to be compatible with existing optics. -The camera should have 3/8-16 UNC (tripod thread) and M4, M5, M6, or M8 mounting screws on the body to rigidly install the device in our setups. -The size of the camera should be limited to 300 mm * 200 mm * 200 mm such that is fits in our set-ups. -The camera should be monochrome without any Bayer filter (to minimize light loss). -The camera should be able to operate between 0–30 degrees Celsius (high room temperatures and down to zero for use inside a cold room). -The camera should have a large memory (more than 100GB) such that long recordings can be made (needed to resolve long-time statistics and to capture rare events that are more common in turbulence than one would expect from normally-distributed events). -The camera should have a variety of input and output signals to trigger and operate it with external hardware (lasers, function generators, trigger-boxes etc): TTL, Sync in/out, SW IN. -The camera should use USB-C or ethernet connection to download the images from the software. -The camera should be compatible with the PFV4 software such that it can operate with existing hardware infrastructure and that the cameras can be programmed and operated using the same software, including doing image calibration to reprogram the CMOS chip to remove noise (“black calibration” or “shading calibration”).

Internal identifier: 11daef5b-9a50-4701-b805-178936e6c749

5.1.1 Purpose

Main nature of the contract: Supplies

Main classification (cpv): 38000000 Laboratory, optical and precision equipments (excl. glasses)

5.1.2 Place of performance

Country: Netherlands

Anywhere in the given country

Additional information: Zie documentatie

5.1.6 General information

The procurement is covered by the

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Government Procurement Agreement (GPA):	no

5.1.16 Further information, mediation and review

Review organisation:	Rechtbank Overijssel

6. Results

Value of all contracts awarded in this notice:	120 000 Euro
Direct award:	
Justification for direct award:	The contract can be provided only by a particular economic operator because of an absence of competition for technical reasons
Other justification:	UT takes the position that the contract can be awarded directly to Acal BFi due to the absence of competition for technical reasons within the meaning of Article 2.32 paragraph 1 sub b bullet 2 Public Procurement Act 2012. According to UT, there is also no reasonable alternative or substitute within the meaning of Article 2.32 paragraph 3 Public Procurement Act 2012 that can meet the reasonable requirements of UT, as stated in the motivation.

6.1 Result lot Identifier: LOT-0000

6.1.2 Information about winners

Winner:	
Official name :	Acal BFi
Tender:	
Tender identifier:	EB-OUT 6792
Identifier of lot or group of lots:	LOT-0000
Value of the tender:	120 000 Euro
Contract information:	
Identifier of the contract:	EB-OUT 6792
Date on which the winner was chosen:	28/08/2025

8. Organisations

8.1 ORG-0001

Official name :	Universiteit Twente
Registration number:	50130536
Postal address:	Drienerlolaan 5
Town:	Enschede
Postcode:	7522NB

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Country subdivision (NUTS):	Twente (NL213)
Country:	Netherlands
Contact point :	Camilio Delfgaauw
Email:	c.delfgaauw@utwente.nl
Telephone:	+31534891512
Internet address:	https://www.utwente.nl
Buyer profile :	https://s2c.mercell.com/buyer/16033

Roles of this organisation:

Buyer

8.1 ORG-0002

Official name :	Rechtbank Overijssel
Registration number:	82940525
Town:	Almelo
Postcode:	7607 GB
Country subdivision (NUTS):	Twente (NL213)
Country:	Netherlands
Email:	communicatie.rb-ove@rechtspraak.nl
Telephone:	(+31)0883611042

Roles of this organisation:

Review organisation

8.1 ORG-0003

Official name :	Acal BFi
Size of the economic operator:	Micro, small, or medium
Town:	eindhoven
Postcode:	5657 EA
Country subdivision (NUTS):	Zuidoost-Noord-Brabant (NL414)
Country:	Netherlands

Roles of this organisation:

Tenderer

Winner of these lots:	LOT-0000

Notice information

Notice identifier /version:	2b11b63c-4f34-4b2c-9450-19abf7b0a619 - 01

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Form type:	Direct award preannouncement
Notice type:	Voluntary ex-ante transparency notice
Notice dispatch date:	29/08/2025 11:45 +00:00
Notice dispatch date (eSender):	29/08/2025 11:46 +00:00
Languages in which this notice is officially available:	English

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