# *ANNEX II + III:* TECHNICAL SPECIFICATIONS + TECHNICAL OFFER

**Contract title: Supply, delivery, and installation of water flow and pressure measurement and control equipment with necessary and adequate fittings**

 **p 1 /…**

**Publication reference:CN1-S.O 2.3-SC011/TD6**

**Columns 1-2 should be completed by the contracting authority**

**Columns 3-4 should be completed by the tenderer**

**Column 5 is reserved for the evaluation committee**

Annex III - the contractor's technical offer

The tenderers are requested to complete the template on the next pages:

* Column 2 is completed by the contracting authority shows the required specifications (not to be modified by the tenderer),
* Column 3 is to be filled in by the tenderer and must detail what is offered (for example the words ‘compliant’ or ‘yes’ are not sufficient)
* Column 4 allows the tenderer to make comments on its proposed supply and to make eventual references to the documentation

The eventual documentation supplied should clearly indicate (highlight, mark) the models offered and the options included, if any, so that the evaluators can see the exact configuration. Offers that do not permit to identify precisely the models and the specifications may be rejected by the evaluation committee.

The offer must be clear enough to allow the evaluators to make an easy comparison between the requested specifications and the offeredspecifications.

Unless otherwise specified, the requirements in these Technical Specifications are presented as a minimum standard which the offered goods must meet in order to be compliant. Tenderers may not submit a variant solution for the items required in these Technical Specifications. When brand names are used in the technical specifications, they are “used in descriptive purposes only” since there is no other comprehensive description possible.

0.1 Minimum requirements and supporting documentation

• Tenderers are required to demonstrate that the offered specifications are responsive to the Tender Dossier requirements identifying model, manufacturer and country of origin of each individual item in their Technical Offer. Tenderers are to provide necessary documentation (catalogues, guides, brochures, manuals, booklets, certificates, attestationsetc.) with detailed technical specifications of all items being offered thus enabling the Contracting Authority to verify the information provided in the offer.

0.2 Completeness of the supply

• Supply delivery, including installation, integration and final customization must include all needed parts, accessories and consumables required for the supplies to be presented for provisional acceptance fully installed, operational and ready for use.

• Consumables, accessories, parts and documentation used during delivery, installation, integration and customization before provisional acceptance must therefore be anticipated and calculated into the offer.

• It shall be the sole responsibility of the Contractor to ensure that all pre-requisites for the completeness of the supply delivery are met before its commencement.

0.3 Supply delivery

• The equipment must have ability to be connected to the standard Beneficiary Country single phase power output connections.

0.4 General Requirements

The equipment must include all the necessary parts and must comply with standards for its use.

User manuals for the equipment must be provided in English.

During the warranty period, the Tenderer shall provide technical service and shall replace any defective part of the system supplied with new, including labour for fitting the part and setting up the system. The response time should be not later than 72 hours after the reporting of the failure. If repair is not possible within a reasonable period, the equipment shall be replaced with a similar item of at least equivalent specifications and standard.

Each item must have marking in accordance the Communication and Visibility in EU-financed external actions requirements (https://ec.europa.eu/europeaid/work/visibility/\_en) and a serial number on the body of the unit. Correct size and design of sticker and wording will be provided to the Contractor by the Contracting Authority. Production and placement of stickers must be calculated in the price of the vehiacle..

0.5 Installation

Equipment should be fully operational upon delivery. Equipment should be instaled at the locations according to the list added to this tender dossier.

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| **1.Item number** | **2.Specifications required** | **3.Specifications offered** | **4. Notes, remarks, ref to documentation** | **5.Evaluation committee’s notes**  |
|   | **Flow and pressure measurement and control equipment with necessary and adequate fittings consisted of:** |   |   |   |
| **1.**    | **Adapter for PE pipes connection** • Made from ductile iron according to standard MKC EN 1563:2012 or equivalent and MKC EN 14525:2009 or equivalent• Flange dimensions according to standard MKC EN 1092-2:2009 or equivalent• Sealing rubbers made of EDPM material according to MKC EN 681-1:2006/A3:2008 or equivalent• Anchoring function – metallic ring• Anti-corrosive protection must be implemented with with an epoxy coating with thickness min 250µm• Nominal pressure min. PN10barWarranty: minimum 1 year, the warranty period must be proven by a document from the manufacturer and it must be intended for the tender procedure**Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**   |   |   |   |
| 1.1 | Adapter for PE pipes connection AF DN200/OD225, PN10 | psc | 5 |   |   |   |
| 1.2 | Adapter for PE pipes connection AF DN100/OD110, PN10 | psc | 3 |   |   |   |
| 1.3 | Adapter for PE pipes connection AF with MF ND80/OD90, PN10 | psc | 2 |   |   |   |
| 2. | **Ductile iron fittings** • Coating: Epoxy min. thickness 250µm• Operating pressure min. PN10bar • In accordance with the following standards:• Design and test methods: MKC EN 545:2010 or equivalent• Flange dimensions and drilling: MKC EN 1092-2:2009 or equivalentWarranty: minimum 1 year, the warranty period must be proven by a document from the manufacturer and it must be intended for the tender procedure**Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  |   |   |   |
|  2.1 | FFR DN250/150, PN10 | psc | 4 |   |   |   |
|  2.2 | FFR DN200/150, PN10 | psc | 1 |   |   |   |
| 2.3 | FF DN200, L=1000mm, PN10 | psc | 1 |   |   |   |
| 2.4 | FF DN200, L=800mm, PN10 | psc | 4 |   |   |   |
| 2.5 | FF DN200, L=300mm, PN10 | psc | 1 |   |   |   |
| 2.6 | FF DN150, L=800mm, PN10 | psc | 3 |   |   |   |
| 2.7 | FF DN100, L=1000mm, PN10 | psc | 1 |   |   |   |
| 2.8 | FF DN100, L=800mm, PN10 | psc | 3 |   |   |   |
| 2.9 | FF DN100, L=400mm, PN10 | psc | 1 |   |   |   |
| 2.10 | FF DN80,L=100 mm, PN10 | psc | 2 |   |   |   |
| 2.11 | T DN200/200, PN10 | psc | 1 |   |   |   |
| 2.12 | T DN200/50, PN10 | psc | 1 |   |   |   |
| 2.13 | T DN150/150, PN10 | psc | 1 |   |   |   |
| 2.14 | T DN150/100, PN10 | psc | 2 |   |   |   |
| 2.15 | T DN100/100, PN10 | psc | 1 |   |   |   |
| 2.16 | T DN100/50, PN10 | psc | 1 |   |   |   |
| 2.17 | Q90 DN100, PN10 | psc | 1 |   |   |   |
| 2.18 | N DN80, PN10 | psc | 2 |   |   |   |
| 2.19 | EKS DN250, PN10 | psc | 4 |   |   |   |
| **3.**      | **Gate valve** • In accordance with the following standards:• MKC EN 1074-1:2010 or equivalent• MKC EN 1074-2:2010 or equivalent• MKC ISO 7259:2010 or equivalent• Face to face dimensions MKC ISO558:17 or equivalent, MKC ISO 5752:2010 short version -serial 14 or equivalent• Flange dimensions and drilling: MKC EN 1092-2:2009 or equivalent• Hydraulic test: MKC EN 12266-1:2012 or equivalent• MKC ISO 5208:2010 or equivalent• Body and bonnet made of ductile iron GJS 400-15 (GGG40)• Inner and outer epoxy coating with min. thickness of at least 250µm• Gate made of ductile iron, protected with vulcanized EPDM and built-in gliders to reduce friction **Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  |   |   |   |
| 3.1 | Gate valve PZ DN200, PN10 | psc | 2 |   |   |   |
| 3.2 | Gate valve PZ DN150, PN10 | psc | 3 |   |   |   |
| 3.3 | Gate valve PZ DN100, PN10 | psc | 3 |   |   |   |
| 3.4 | Gate valve PZ DN80 with telescopic unit, PN10 | psc | 2 |   |   |   |
| 3.5 | Gate valve PZ DN50, PN10 | psc | 2 |   |   |   |
| **4.**    | **Mounting-dismantling pieces**• Body made of carbon steel ST37-2 or equivalent• Made of 3 flanges made according to MKC EN 1092-1:2018 standard or equivalent• Sealing with EPDM material• Anti-corrosive protection implemented with with an epoxy coating with thickness min 250µm• Nominal pressure min. PN10barWarranty: minimum 1 year, the warranty period must be proven by a document from the manufacturer and it must be intended for the tender procedure**Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**   |   |   |   |
| 4.1 | Mounting-dismantling pieces MDP DN200, PN10 | psc | 2 |   |   |   |
| 4.2 | Mounting-dismantling pieces MDP DN150, PN10 | psc | 3 |   |   |   |
| 4.3 | Mounting-dismantling pieces MDP DN100, PN10 | psc | 2 |   |   |   |
| **5.**  | **Strainer Y-typeDN150 PN10**• Material: Cast iron according to EN-GJS 500-7• Screen made from stainless steel min AISI 304 (1.4301) • Face to face according to standard MKC EN 558:2017 series 1 or equivalent• Flange dimensions according to standard MKC EN 1092-2:2009 or equivalent• Anti-corrosive protection implemented with with an epoxy coating with thickness min 250µm• Nominal pressure min. PN10barWarranty: minimum 1 year, the warranty period must be proven by a document from the manufacturer and it must be intended for the tender procedure**Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**   | psc | 1 |   |   |   |
| **6.**   | **Automatic pressure sustaining valvefor maintaining the inlet pressure DN 150 PN10**• Diaphragm control valve• Must consist of valve body and pilot circuit ( ball valve, lockable centralized contril unit, pilot valves to regulate the pressure as required, position indicator, pressure sustaining/relief pilot, gauge holder ball valve, manometer)• In accordance with the following standards:• Length: MKC EN 558:2017 series 1, MKC ISO 5752:2010 or equivalent• Flanges: MKC EN 1092-2:2009 or equivalents• Hydraulic test: MKC EN 12266-1:2012 or equivalent, MKC ISO 5208:2010 or equivalentMaterial:• Body and cover made of ductile iron GJS 400-15 (GGG40), Epoxy coating with min 250µm, according to MKC EN 14901:2014 or equivalent• Pilot circuit tubing made of stainless steel• Indicator main valve position• Diaphragm nylon anchor rubber or equivalent• Spring made of min stainless steel AISI 302• Studs, nuts, washer of stainless steel AISI 303 at least, Quad-ring made of Nitrile NBR rubber• Stem made of min. stainless steel AISI 303• Seat made of min. stainless steel AISI 316 • Cover with anti-cavity shape and quad-ring sealing• The central control unit must contain:• Control of reaction speed• Control of opening and closing speed• Strainer• Min. regulation range of 1.4bar to 12bar• Nominal pressure min. PN10barWarranty: minimum 1 year, the warranty period must be proven by a document from the manufacturer and it must be intended for the tender procedure**Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | psc | 1 |    |    |    |
| **7.**   | **Tapping saddles (steel, cast and ductile iron and asbestos-cement pipelines)** • According to MKC EN 545:2010 or equivalent• Saddle of ductile iron GJS 400-15 according to MKC EN 1563:2012 or equivalent• Stailness steel tightening stirrup with female thread according to MKC EN ISO 228-1:2009 or equivalent• Working pressure 16 bar and test pressure 25 bar• Seal of NBR material or equivalent• Tightening bracker of stainless steel with degree of quality 1.4301 (AISI 304) or equivalent• Anti-corrosive protection with an epoxidy coating with thickness min 250µmМаximum operating temperature of at least +50o CWarranty: minimum 1 year, the warranty period must be proven by a document from the manufacturer and it must be intended for the tender procedure**Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  |   |   |   |
| 7.1 | Tapping saddles (steel, cast and ductile iron and asbestos-cement pipelines) DN200mm/ 2" | psc | 1 |   |   |   |
| 7.2 | Tapping saddles (steel, cast and ductile iron and asbestos-cement pipelines) DN150mm/ 2" | psc | 1 |   |   |   |
| **8.**       | **Tapping saddles for PE/PVC pipes**• According to MKC EN 545:2010 or equivalent• Body of ductile iron GJS 400-15 according to MKC EN 1563:2012 or equivalent• Stainless steel tightening stirrup with female thread according to MKC EN ISO 228-1:2009 or equivalent• Working pressure 16 bar and test pressure 25 bar• Seal made of EPDM material • Anti-corrosive protection with an epoxidy coating with thickness min 250µmWarranty: minimum 1 year, the warranty period must be proven by a document from the manufacturer and it must be intended for the tender procedure**Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**   |   |   |   |
| 8.1 | Tapping saddles for PE/PVC pipe DN250mm / 2“ | psc | 1 |   |   |   |
| 8.2 | Tapping saddles for PE/PVC pipe DN110mm / 1“ | psc | 2 |   |   |   |
| 8.3 | Tapping saddles for PE/PVC pipe DN160mm / 2“ | psc | 1 |   |   |   |
| 8.4 | Tapping saddles for PE/PVC pipe DN90mm / 1“ | psc | 3 |   |   |   |
| 8.5 | Tapping saddles for PE/PVC pipe DN63mm / 1“ | psc | 2 |   |   |   |
| 8.6 | Tapping saddles for PE/PVC pipe DN50 / 1" | psc | 1 |   |   |   |
| **9.** | **Pressure sensor** 0-10bar• Ceramic sensor• Input pressure range of 0 to 400 bar• Accuracy according to IEC 60770 or equivalent (accuracy of at least ±0.5%) • Power supply of 24VDC• Output signal of 4..20 mA (two wires)• Size of port G ½’’or G ¼’’Warranty: minimum 1 year, the warranty period must be proven by a document from the manufacturer and it must be intended for the tender procedure**Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**   | psc | 17 |   |   |   |
| **10.** | **Level sensor**• Ceramic sensor• Input pressure range of 0÷100mH20• Accuracy according to IEC 60770 or equivalent (accuracy min ±0.5%)• Power supply of 24VDC• Output signal of 4.. 20 mA / Vs = 8 …32 V DC• Probe diameter max. 35mm• Protection min IP68 or equivalent• Degree of safety according to IEC 61508/IEC 61511 or equivalent• Level sensor 0-6mPermissible temperature min -25oC to +80o CWarranty: minimum 1 year, the warranty period must be proven by a document from the manufacturer and it must be intended for the tender procedure**Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | psc | 2 |    |    |    |
| **11.**   | **Electric valve – Gate valve with electrical motorDN150, PN10**• In accordance with the following standards:• MKC EN 1074-1:2010 or equivalent• MKC EN 1074-2:2010 or equivalent• MKC ISO 7259:2010 or equivalent• Face to face dimensions MKC ISO558:17 or equivalent, MKC ISO 5752:2010 short version -serial 14 or equivalent• Flange dimensions and drilling: MKC EN 1092-2:2009 or equivalent• Hydraulic test: MKC EN 12266-1:2012 or equivalent• MKC ISO 5208:2010 or equivalent• Body and bonnet made of ductile iron GJS 400-15 (GGG40)• Inner and outer epoxy coating with min. thickness of at least 250µm• Gate made of ductile iron, protected with vulcanized EPDM and built-in gliders to reduce friction • Operating stem made of stainless steel with a minimal degree of quality of 1.4021 (X20Cr13)• Seal bush with at least 2 O-rings and dust seal• Maintenance: do not require any special tools or any specific protection procedures• Nominal pressure min. PN10bar Electric motor drive – activator AUMA SA or equivalent specifications:• Power supply 400V 50Hz 3-phase• Outer degree of protection of IP68• 2 adjustable switches• 2 adjustable current switches• Mechanical position indicator Warranty: minimum 1 year, the warranty period must be proven by a document from the manufacturer and it must be intended for the tender procedure**Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  | psc | 2 |    |    |   |
|   |
| **12.** | **Ultrasound flow water meter (for installation on pipe DN300)**• Wall mounted• Flow meter should operate through pipes with diameters range from 10 mm to 3000 mm• LCD display• Communication RS485, USB, Modbus RTU, HART• Data transfer and analysis software• Flow velocity range min 0.01...25 m/s• Accuracy volume flow min ± 1... 3% of measured value, or min ± 0.5% with process calibration• Response time min 50s• Power supply options – 240VAC on 50Hz, 9...36VDC, solar panel, battery power• Degree of protection min IP66 or equivalent according to EN 60529Temperature range min -30oC to +80o CWarranty: minimum 1 year, the warranty period must be proven by a document from the manufacturer and it must be intended for the tender procedure**Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  | psc | 1 |   |   |   |
| **13.** | **Electromagnetic water flow meter DN200mm PN10**• Flanges with dimensions according to standard MKC EN 1092-1:2018 or equivalent• Power supply: 220VAC 50Hz or 24VDC• The backlit display must be rotated easily without the need for tools. adjustable and fully-configurable display (the character size, number of lines and display resolution, contrast)• Degree of protection of the transmitter min IP65 or equivalent • Degree of protection of the sensor minIP68 or equivalent• Transmitter and sensor to be installed separately (connected with cable)• Self-calibrating transmitter and continuous self-check of the sensor and the transmitter• Octagonal sensor for installation of elements after the sensor without influencing measurement accuracy• Sensor must be bi-directional• Accuracy min ±0.4%• Certified with MID and OIML or equivalent• Output signal of 4-20 mA, two impulse outputs• Programmable multiple-alarm capability • Communications: HART, options for MODBUS and PROFIBUS communication, communication with computer via IR and serial port• Nominal pressure min PN10bar • Cable length min. 10mOperating temperature range min -20oC to +60o CWarranty: minimum 1 year, the warranty period must be proven by a document from the manufacturer and it must be intended for the tender procedure**Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | psc | 1 |   |   |   |
| **14.** | **Automatic air valve DN50, PN10**• Material: ductile iron GJS 400-15 (GGG40)• In accordance with the following standards:• MKC EN 1074-1:2010 or equivalent, MKC EN 1074-4:2010 or equivalent• Flange dimensions according to MKC EN 1092-2:2009 or equivalent• Both inner and outer anti-corrosive protection with epoxy coating, according to MKC EN 14901:2014 or equivalent• All rubber elements which will come into contact with water of EPDM material• Nuts, bolts, washer of stainless steel• Must contain deaerification valve• Double orifice and the following three functions:• Airing large quantities of air when filling pipeline• Airing small quantities of air/degassing when pipeline is under pressure• Sucking in large quantities of air when emptying pipeline• Nominal pressure min PN10bar Warranty: minimum 1 year, the warranty period must be proven by a document from the manufacturer and it must be intended for the tender procedure**Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | psc | 2 |   |   |   |
| **15.** | **Underground fire hydrants DN80**• Material: ductile iron GJS 400-15 (GGG40)• Inner and outer epoxy coating with thickness min 250µm• Flange dimensions and drilling according to MKC EN 1092-2:2009 or equivalent• Stem made of stainless steel of at least 13% chrome (Cr), with valve-bolt made of ductile iron protected with vulcanized EPDM• Automatic drainage function• Nominal pressure min PN16bar Warranty: minimum 1 year, the warranty period must be proven by a document from the manufacturer and it must be intended for the tender procedure**Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | psc | 2 |   |   |   |
| **16.**  | **Manhole cover with round frame*** Supply, transport and installation of cast iron cover D400 of medium type, with opening Ø600mm

• According standard MKC EN 124:2010 or equivalent• Class D 400• Cover and frame made of ductile iron with anti-corrosive coating• Cover connected to the frame via a hinge on one side and automatic locking by spring bar other side• Dynamic stability must be obtained with at least 3 points of contact• Optimized frame for bedding• The construction must provide opening of the cover of at least 130o and blockage of the cover of 90o for protection of sudden closureWarranty: minimum 1 year, the warranty period must be proven by a document from the manufacturer and it must be intended for the tender procedure**Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | psc | 4 |    |    |    |
| **17.** | **Photovoltaic panels 150W** • Electrical characteristics of the panel at NOCT: radiation of 1000w / m2, t = 25 C and A.M = 1.5• Rated power (Pmax) min 150 W• Voltage at Pmax (Umax) min 17.86 V• Current at Pmax (I max) min 8.400 A.• Open circuit voltage (Uoc) min 21.7 V• Short circuit current (Ioc) min 8.9 A• Power tolerance at Pmax +/- 5%• Maximum system voltage min 1000 VCharging controllers should be included and installed together.Warranty: minimum 1 year, the warranty period must be proven by a document from the manufacturer and it must be intended for the tender procedure**Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | psc | 12 |   |   |   |
| **18.** | **Batteries** • Voltage min 12VDC• Power min 65 AhTo be installed together with item no. 17. Warranty: minimum 1 year, the warranty period must be proven by a document from the manufacturer and it must be intended for the tender procedure**Manufacturer’s name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Product type, model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | psc | 12 |   |   |   |