# JERICO QUESTIONNAIRE

## **Task 4.1 Calibration**

### **Overview of the calibrating facility**

**Contact Details** 

NAME/DESIGNATION (if any): Laboratório de Calibração MANAGING INSTITUTE/ORGANIZATION: Instituto Hidrográfico DEPARTMENT (if any): Serviço de Electrotecnia ADDRESS: Instituto Hidrográfico – Instalações Navais da Azinheira – Marinha - SEIXAL

COUNTRY: PORTUGAL TEL: FAX:

Name of contact-person: Manuel Marreiros E-mail: Jesus.Marreiros@hidrografico.pt

#### Part a: General Information

1. Does your calibrating facility possess a well-defined organizational framework with		
Dedicated staff?	Yes	
Clear hierarchy?	Yes	
Transparent chain of responsibility for management, technical/scientific		
and operational decisions)?	Yes	
(If <b>No</b> to any of the above, please provide a brief description of how your facility is organized		
below)		

(Add lines as necessary)

2. Briefly describe the size and nature of the annual operating budget of your facility. Is it funded by your Institute/Centre? Yes/No If Yes, is the funding constant? Yes/No Is it funded by Projects? Yes/No Is there separate funding for upgrading or acquiring new instrumentation, etc.? Yes/No (Kindly provide an estimate of the annual operating budget and any additional information you think may be helpful below)

(Add lines as necessary)

Does your facility employ Quality Management Standards - ISO 9000:2000, ISO 10012, Good Laboratory Practice (GLP), and the like - to its calibration systems? (If Yes, please specify below)

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ISO 9000:2000, ISO 10012, ISO/IEC 17025

(Add lines as necessary)

4. Does your facility possess any kind of accreditation for the calibrations? Yes (If Yes, please specify the parameter/s or measurand/s concerned, the kind of accreditation and the issuing body below)
\_\_pressure (calibration of hydrostatic pressure sensors) IPAC – is the National issuing body.

(Add lines as necessary)

5. Does your facility actively endorse a policy of continual training/education of	
personnel actively involved in calibration activity?	
(If Yes, please provide a brief description of the kind of activities promoted below)	
_Training for calibration, quality and metrology area.	

\_\_\_\_\_

(Add lines as necessary)

6. Does your facility maintain a documented in-house Quality Assurance Programme?	Yes
<ol> <li>Does your facility maintain a formal Quality Manual (containing, at the very least, listings and descriptions of equipment and procedures, maintenance/calibration records and certificates for instrumentation, and</li> </ol>	
safety precautions and regulations)?	Yes
<ul> <li>8. Does your facility make use of control charts (Shewhart Charts, other) for Quality Control purposes? (If Yes, please give details below)</li> </ul>	No

(Add lines as necessary)

9. Can your facility assure an effective traceability chain to primary standards or, in their absence, to conventionally accepted reference material (certified or otherwise)?	Yes
10. Does your facility furnish uncertainty estimations for its calibration systems?	Yes
<ul> <li>11. Does your facility maintain links of any kind with the National Metrology Institute/s (NMI/s) of your country?</li> <li>(If Yes, please describe the nature of the relationship/s below)</li> <li>Client from IPQ (Instituto Português da Qualidade)</li> </ul>	Yes

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(Add lines as necessary)

12. In the list of sensors below, please indicate only the ones that you currently <u>never</u> calibrate yourselves; in each case, kindly report the calibration provider (manufacturer, other) and the typical calibration interval (trimonthly, half-yearly, yearly, other) you are presently employing.

<u>Physical sensors for</u> :	
Temperature,	Conductivity (Salinity),
□ Dissolved oxygen,x	Water Currents,x
Pressure,	
Optical sensors for:	
□ Chlorophyll a,x	Turbidity,x
□ Photosynthetically Active Radiation (PAR), _	X
<u>Chemical sensors for</u> :	
Phosphates,x	$\Box$ Silicates,x
$\Box$ Nitrates,x	$\Box$ Nitrites, x
□ Ammonia, x	□ Dissolved oxygen, x
□ pH, x	□ Total alkalinity, x
Total carbon dioxide, x	□ Dissolved organic carbon, x
Total organic carbon, x	_

Please complete the questionnaire using the forms furnished in the following pages to provide details regarding your calibration practices for all the sensors in the above list that you <u>do</u> calibrate routinely.