Format for Biennial Reports by UNESCO’s Water-related Centres on activities related to the IHP in the period (June 2014 – May 2016)

1. Basic information on the centre

<table>
<thead>
<tr>
<th>Name of the Centre</th>
<th><strong>International centre for coastal ecohydrology</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Director</td>
<td>Luis Chicharo</td>
</tr>
<tr>
<td>Name and title of contact person (for cooperation)</td>
<td>Luis Chicharo, Professor, Director</td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:ichichar@ualg.pt">ichichar@ualg.pt</a></td>
</tr>
<tr>
<td>Address</td>
<td>Universidade do Algarve</td>
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<tr>
<td></td>
<td>Campus de Gambelas</td>
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<tr>
<td></td>
<td>FCT- building 8</td>
</tr>
<tr>
<td></td>
<td>8005-139 Faro</td>
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<tr>
<td></td>
<td>Portugal</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.icce.org">www.icce.org</a></td>
</tr>
<tr>
<td>Location of centre</td>
<td>Faro</td>
</tr>
<tr>
<td>Geographic orientation</td>
<td>☑️ global ☐️ regional</td>
</tr>
<tr>
<td>Region(s) (for regional centres)</td>
<td>European</td>
</tr>
<tr>
<td>Year of establishment</td>
<td>----</td>
</tr>
<tr>
<td>Year of renewal assessment</td>
<td>----</td>
</tr>
<tr>
<td>Signature date of most recent Agreement</td>
<td>2010</td>
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Themes Of activities during reporting period

<table>
<thead>
<tr>
<th>Focal Areas</th>
<th>☑️ groundwater</th>
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<tbody>
<tr>
<td></td>
<td>☑️ urban water management</td>
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<tr>
<td></td>
<td>☐️ rural water management</td>
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<tr>
<td></td>
<td>☐️ arid / semi-arid zones</td>
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<tr>
<td></td>
<td>☑️ humid tropics</td>
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<tr>
<td></td>
<td>☑️ cryosphere (snow, ice, glaciers)</td>
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<tr>
<td></td>
<td>☑️ water related disasters (drought/floods)</td>
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<tr>
<td></td>
<td>☐️ Erosion/sedimentation, and landslides</td>
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<tr>
<td></td>
<td>☑️ ecohydrology/ecosystems</td>
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<tr>
<td></td>
<td>☐️ water law and policy</td>
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<tr>
<td></td>
<td>☐️ social/cultural/gender dimension of water</td>
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<td></td>
<td>☑️ transboundary river basins/ aquifers</td>
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<td></td>
<td>☑️ mathematical modelling</td>
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<td></td>
<td>☐️ hydroinformatics</td>
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<td></td>
<td>☐️ remote sensing/GIS</td>
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<td></td>
<td>☑️ IWRM</td>
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<td></td>
<td>☑️ Watershed processes/management</td>
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<td></td>
<td>☐️ global and change and impact assessment</td>
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<td></td>
<td>☐️ water education</td>
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<td>☑️ water quality</td>
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<td></td>
<td>☐️ nano-technology</td>
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<td></td>
<td>☑️ waste water management/re-use</td>
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<tr>
<td></td>
<td>☐️ water/energy/food nexus</td>
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<tr>
<td></td>
<td>☐️ water systems and infrastructure</td>
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<tr>
<td></td>
<td>☑️ other: (please specify): estuarine and coastal ecohydrology</td>
</tr>
</tbody>
</table>

Scope of Activities |

| ☑️ vocational training |
| ☐️ postgraduate education |
| ☐️ continuing education |
| ☑️ public outreach |
| ☑️ research |
| ☑️ institutional capacity-building |
| ☑️ advising/ consulting |

* check on appropriate box
* check all that apply
<table>
<thead>
<tr>
<th><strong>Software development</strong></th>
<th>☐ software development</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data-sets/data-bases development</strong></td>
<td>☐ data-sets/data-bases development</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>☐ other: (please specify) __________________</td>
</tr>
</tbody>
</table>

### Support bodies

1. Government of Republic of Poland  
2. University of the Algarve  

### Hosting organization

1. University of Algarve  

### Sources of financial support

1. **Main:**  
   - Ministry of Science and Higher Education  
2. **Additional:**  
   - Framework Programme (H2020)  
   - UNESCO Activity-Financing Contracts  
   - Consulting  

### Existing networks and cooperation

1. **International Networks:**  
   - LOICZ – land ocean interaction for coastal zones  
   - Erasmus Mundus (EU)  
   - UNESCO IHP – co chair of the Scientific Steering Committee for the Ecohydrology Programme,  
   - UNESCO-IHP Ecohydrology Demosites Project  
2. **International Projects:**  
   - Developing an integrated model to predict abiotic habitat conditions and biota of rivers for application in climate change research and water management IMPACT (ERA-IWRM)

### Governance

1. **X** director and governing board  
2. **Other:** (please specify) __________________  
3. **Link to election of board members to the IHP Intergovernmental Council (IGC) and hosting country IHP National Committee**  
4. **Frequency of meetings:** once every year(s)  
5. **Existence of UNESCO presence at meetings**

### Institutional affiliation of director

1. University of Algarve, Campus Gambelas

### Number of staff and types of staff

1. Total number of staff (full-time, or equivalent): 5  
2. Number of staff who are water experts: 2  
3. Number of visiting scientists: 11  
4. And postgraduate students: 7  

### Annual turnover budget in USD

2. **Activities undertaken in the framework of IHP in the period June 2014 – May 2016**

2.1 Educational activities (i.e., those with accreditation) that directly contributed to the IHP-VIII (Appendix 1) and WWAP  

*Please include here those activities which led to accreditation of degrees, or those held in formal school settings.*

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1. Please specify bodies that cover the operational costs of the centre, and other essential costs such as salaries and utility bills, and that provide institutional support to ensure centre’s sustainability  
2. If different from support bodies  
3. Please specify sources of main budgetary and extra budgetary funds to implement projects  
4. Please write international networks, consortiums or projects that the centre is part of, or any other close links that the centre has with international organizations or programmes, which are not already mentioned above
ERASMUS MUNDUS Master Course on Ecohydrology (ECOHYD) (partnership with Uviv Algarve, UNESCO-ERCE (Poland), UNESCO-IHE (Netherland), Cau Kiel (Germany), Univ La Plata (Argentina), Univ Espirito Santo Brazil)

Master in Urban Water Cycle (at Univ Algarve)

2.2 Research activities that directly contributed to the IHP-VIII activities

*Please include research/applied projects outputs such as publications that directly contributed to the IHP-VIII and WWAP objectives*

*Research projects:*
Developing an integrated model to predict abiotic habitat conditions and biota of rivers for application in climate change research and water management IMPACT (ERA-IWRM)

List of publications attached in annex.

2.3 Training activities that directly contributed to the IHP-VIII and WWAP objectives

1. Courses prepared and delivered within the ECOHYD - Erasmus Mundus Master of Science in Ecohydrology, realized in the collaboration with the University of Algarve
2. Training course in Coastal Ecohydrology – Exuma, Bahamas (UNESCO LAC)
3. Training course in Coastal ecohydrology and ecosystem services – Univ Espirito Santo, Brazil

3. **Collaboration and linkages**

3.1 Participation in major international networks, programmes, partnerships with other UN or other International Agencies, media and professional bodies

- member of the Scientific Steering Committee of the UNESCO IHP Ecohydrology Programme;
- Coordinator of the LOICZ node for Africa and Middle East
- Erasmus Mundus

3.2 Participation in meetings related to the IHP and UNESCO (e.g. the UNESCO General Conference, the UNESCO Executive Board, the IHP Intergovernmental Council and/or other meetings organized by IHP)

- Meeting of water related UNESCO Category II Centres and UNESCO Chairs, and COP21, "Water, People and Cooperation: regional perspectives in a context of climate change", 2-3 December 2015, Paris, France
- UNESCO Ecohydrology Scientific Advisory Committee, 25 February 2016, Paris, France
- UNESCO centres meeting, Beijing, 16-18 May 2016

3.3 **Collaboration and networking with other UNESCO category 1 or 2 institutes/centres**
3.3.1 cross-appointment of directors of the category 1 or 2 institutes or centres on the governing board

Governing Member of UNESCO HIDROEX (Brazil) and UNESCO ERCE Poland

3.3.2 exchange of information on activities such as training/educational materials, and funding opportunities

Cooperation with ERCE on funding and educational activities

3.3.3 exchange of staff, most notably professionals and students

Visits of:
- Prof. Demin Zhou form Capital Normal University, China;
- Prof. Paul Dubowy – Army Corps of Engineers
- Prof Azime Tezer – Istanbul University
- Prof. Marcelo Gaviño – Univ La Plata, Argentina
- Prof Gilberto Barroso – UFES Brazil
- Prof Maciej Zalewski ERCE, Poland
- Prof William Mitsch,
- Prof Jeff Camkin, Australia
- Prof Oli Saaid, Univ Bizerte Tunisia
- Prof Hoda Soussa, Ain Sharms Univesity, Egypt
- Prof Susana Neto, Lisbon University

3.3.4 implementation of joint activities, such as workshops, conferences, training programmes, joint projects, field visits, software and data sharing, knowledge exchange and publications

Sumer courses in Brazil
Ec hydrology conferences at UNivesity Algarve and in Lodz, in collaboration with ERCE
Knowledge sharing
Erasmus mundus Master Course on Ecohydrology (ECOHYD) with ERCE, UNESCO-IHE Delft, Lodz University & CAU Kiel University.
Water education in African Portuguese Speaking Counties

Knowledge exchange with:
- UNESCO ERCE, Poland
- UNESCO LAC

3.4 Relationships with the UNESCO field and regional office whose jurisdiction covers the country of location

3.5 Relationship with the UNESCO National Commission and the IHP National Committee in the country of location and with other organizations of other countries

Very good and close relation, involving sharing of information and join activities

3.6 Relationship with other UNESCO-related networks, such as UNESCO Clubs, ASPnet, and UNESCO chairs

Collaboration with the UNESCO Chair in Ecohydrology UNESCO Chair in “Ecohydrology: water for ecosystems and societies” at the University of Algarve
4. Communication
4.1 Communication and knowledge dissemination activities undertaken in the framework of IHP

Meetings/conferences/courses organized & co-organized by ERCE:

- The International Symposium on Ecohydrology, Biotechnology and Engineering: Towards Harmony between the Biogeosphere and Society on the basis of Long-Term Ecosystem Research, 17 – 19 September 2014, Łódź (Poland)
- Ecohydrology’ 2015 Measuring, Modeling and Managing of the natural processes related to water flows, Social values of the linked ecosystem services 21 - 23 September 2015, Lyon (France)
- Erasmus Mundus Master of Science in Ecohydrology, realized in the collaboration with the University of Algarve
- Training course in Coastal Ecohydrology – Exuma, Bahamas (UNESCO LAC)
  - Training course in Coastal ecohydrology and ecosystem services – Univ Espirito Santo, Brazil

Participation in meetings/conferences:

- Ecohydrology 2015. 21-23 September 2015, Lyon (France)
- The International Symposium on Ecohydrology, Biotechnology and Engineering: Towards Harmony between the Biogeosphere and Society on the basis of Long-Term Ecosystem Research, 17 – 19 September 2014, Łódź (Poland)

4.2 Policy documents and advice

5. Update on Centre Operations
5.1 Membership of the Board of Governors between designated period

5.2 Key decisions made (attach minutes of meetings)

6. Evidence of the Centre’s Impacts
6.1 Science Impacts (Major contributions to the science, technology, education, and regional and/or international cooperation in the field of water)

6.2 Knowledge Transfer Impacts (Major achievements in the dissemination of knowledge and technology transfer)

Lectures for international bodies and organizations:

6.3 Policy Impacts (advice sought by government and other bodies and evidence of inputs into policy arena)

7. Future activities that will contribute directly to IHP and/or to WWAP
7.1 Operational Plan (attach if available)

Strategic Plan linked with IHP-VIII (Appendix 1). Focal areas within IHP-VIII

ICCE is dedicated mostly to the following Themes of the Eighth Phase of the IHP (2014-2021) Water security: addressing local, regional, and global challenges
THEME 1: WATER-RELATED DISASTERS AND HYDROLOGICAL CHANGE
Focal area 1.1 - Risk management as adaptation to global changes

THEME 2: GROUNDWATER IN A CHANGING ENVIRONMENT
Focal area 2.3 - Adapting to the impacts of climate change on aquifer systems
Focal area 2.4 - Promoting groundwater quality protection

THEME 3: ADDRESSING WATER SCARCITY AND QUALITY
Focal area 3.4 - Addressing water quality and pollution issues within an IWRM framework - improving legal, policy, institutional, and human capacity
Focal area 3.5 - Promoting innovative tools for safety of water supplies and controlling pollution

THEME 5: ECOCYDROLOGY, ENGINEERING HARMONY FOR A SUSTAINABLE WORLD
Focal area 5.2 - Shaping of the catchment ecological structure for ecosystem potential enhancement — biological productivity and biodiversity
Focal area 5.3 - Ecohydrology system solution and ecological engineering for the enhancement of water and ecosystem resilience and ecosystem services
Focal area 5.5 - Ecohydrological regulation for sustaining and restoring continental to coastal connectivity and ecosystem functioning

THEME 6: WATER EDUCATION, KEY FOR WATER SECURITY

8. Annexes

8.1 List of publications released by the centre (there can be overlap with those listed in 2.3 above)
