WP6 – COORDINATING THE NUCLEARIZATION OF FUSION Work Plan

FuseNet Association
Christian Schönfelder

Kick-off Meeting of the ANNETTE Project
February 9-10, 2016 – University of Pisa, Italy

This project has received funding from the EURATOM research and training Work Programme 2014 – 2015
WP6 - Objectives

- To facilitate adaptation of existing education and training curricula to or the development of new curricula for the specific nuclear related competence needs of the work force in design and construction of fusion facilities (e.g. ITER, DEMO)
- To provide suitable training courses or other forms of informal or non-formal learning, thereby contributing to the Advanced European Programme for CPD and the Summer School with specific courses on Fusion
- To implement adapted or newly developed courses or other forms of learning
- To assess the quality and effectiveness of the implemented courses or other forms of learning and discuss the possible means to ensure sustainability of these initiatives beyond the end of the project
Participants Names

Contribution to WP6

• **FuseNet Association** (Task Leader)
  plus the following FuseNet members as Linked-Third-Parties:
  
  – **Eindhoven University of Technology**
  
  – **Ghent University**
  
  – **Schoenfelder.Training**
WP6 - Tasks

• **T6.1**
*Investigate and Specify the Specific Competence Needs for the Transition of Fusion to a Nuclear Technology*
Task Leader: Schoenfelder.Training
Task Partners:FuseNet, Eindhoven University of Technology, Ghent University

• **T6.2**
*Design and Development of Fusion Specific Training Addressing the Competence Needs As Specified in T6.1*
Task Leader: Schoenfelder.Training
Task Partners:FuseNet, Eindhoven University of Technology, Ghent University

• **T6.3**
*Implement and Evaluate Courses or Other Forms of Learning As Designed and Developed in T6.2*
Task Leader: FuseNet
Task Partners: Eindhoven University of Technology, Ghent University, Schoenfelder.Training

• **T6.4**
*Support the Participation in Nuclear Training Activities*
Task Leader: FuseNet
Task Partners: Eindhoven University of Technology, Ghent University, Schoenfelder.Training

This project has received funding from the EURATOM research and training Work Programme 2014 – 2015
WP6 - Deliverables

- D6.1: Report on the competence needs with respect to nuclearization of fusion (month 12)
- D6.2: Report on the available nuclear training programmes of relevance for fusion, and identification of the gaps. (month 18)
- D6.3: Report on the (2) newly developed fusion specific nuclear training courses (month 30)
- D6.4: Report on a pilot run of training courses on nuclear awareness for the fusion field. The report will include recommendations for further development of this or similar courses. (month 36)
- D6.5: Report on the participation of fusion professionals in nuclear training activities, including statistics, feedback from trainees, availability of courses and recommendations for further improving the efficiency of the training programme (month 48)

This project has received funding from the EURATOM research and training Work Programme 2014 – 2015
WP6 – Schedule and Milestones

<table>
<thead>
<tr>
<th>Task ID</th>
<th>Work Package and Task Description</th>
<th>Year 1 Month</th>
<th>Year 2 Month</th>
<th>Year 3 Month</th>
<th>Year 4 Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>T6.1</td>
<td>INVESTIGATE AND SPECIFY THE SPECIFIC COMPETENCE NEEDS</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12</td>
</tr>
<tr>
<td>T6.2</td>
<td>DESIGN AND DEVELOPMENT OF FUSION SPECIFIC TRAINING</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T6.3</td>
<td>IMPLEMENT AND EVALUATE COURSES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T6.4</td>
<td>SUPPORT THE PARTICIPATION IN NUCLEAR TRAINING ACTIVITIES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **M6.1** Specification of nuclear competences need in fusion (Month 12)
- **M6.2** Fusion specific training course developed (Month 36)
- **M6.3** Running of pilot fusion specific nuclear training course (Month 42)
### WP6 – Allocation of Resources

#### WP6: Coordinating the Nuclearization of Fusion

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Person/ months</th>
<th>FuseNet</th>
<th>TU/e</th>
<th>Schoenfelder, Training</th>
<th>University Ghent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T6.1</strong> Investigate and specify the specific competence needs for the transition of fusion to a nuclear technology</td>
<td>4,5</td>
<td>1</td>
<td>0,5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>T6.2</strong> Design and development of fusion specific training addressing the competence needs as specified in T6.1</td>
<td>7</td>
<td>2</td>
<td>0,5</td>
<td>4</td>
<td>0,5</td>
</tr>
<tr>
<td><strong>T6.3</strong> Implement and evaluate courses or other forms of learning as designed and developed in T6.2</td>
<td>5,5</td>
<td>2,5</td>
<td>0,5</td>
<td>2</td>
<td>0,5</td>
</tr>
<tr>
<td><strong>T6.4</strong> Support the participation in nuclear training activities</td>
<td>3</td>
<td>2,5</td>
<td>0,5</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total / Sub-Totals</strong></td>
<td>20</td>
<td>8</td>
<td>2</td>
<td>8</td>
<td>2</td>
</tr>
</tbody>
</table>
## WP6 – Details
### Planning of T6.1

<table>
<thead>
<tr>
<th>WP6</th>
<th>COORDINATING THE NUCLEARIZATION OF FUSION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>T6.1</td>
<td>INVESTIGATE AND SPECIFY THE SPECIFIC COMPETENCE NEEDS FOR THE TRANSITION OF FUSION TO A NUCLEAR TECHNOLOGY</td>
</tr>
<tr>
<td>T6.1.1</td>
<td>Contact fusion stakeholders and build up network for work support (delivery of input information, providing comments on work results, ...)</td>
</tr>
<tr>
<td>T6.1.2</td>
<td>Select and agree with fusion stakeholders suitable job profiles for further investigation</td>
</tr>
<tr>
<td>T6.1.3</td>
<td>Identify &quot;nuclear&quot; mandatory/ important/ desirable competences for selected job profiles by desktop research / input from fusion stakeholders</td>
</tr>
<tr>
<td>T6.1.4</td>
<td>Specify how to modify selected job profiles in order to include nuclear competences (in terms of learning outcomes)</td>
</tr>
<tr>
<td>T6.1.5</td>
<td>Develop report (deliverable D6.1) and have it agreed with fusion stakeholders</td>
</tr>
</tbody>
</table>

This project has received funding from the EURATOM research and training Work Programme 2014 – 2015
WP6 – Success factors

• Good contacts to and effective support by fusion stakeholders (e.g. IO, F4E, ASN, CCFE, EUROfusion, FIIF, ...)

• Good contacts to and effective support by providers of nuclear education and training (universities, industrial training providers)

• Effective interface to other ANNETTE work package contributors (e.g. WP2, WP5, but also WP4)
In accordance with the 2006 French law on Transparency and Nuclear Security, a Local Information Commission (Commission locale d’information, or CLI) has been created. This independent body acts as an interface between the ITER Organization and the local population for questions of nuclear safety, radioprotection and the installation’s impact on personnel and the environment. The ITER Organization and the French Nuclear Safety Agency (ASN) provide the ITER CLI with any information necessary to the exercise of its mission. The group, which meets regularly, is composed of representatives from local government, environmental groups, trade unions, businesses and health professionals.