



## TRAINING VISIT PROGRAMME

Technical University of Denmark, Department of Civil Engineering

March 25<sup>th</sup> – April 4<sup>th</sup>, 2019

### **PART 1 – Key concepts of the post-earthquake fire response of structures**

As a first part of the training, a trainee will be provided with a selection of publications on the topic of post-earthquake fire (PEF) resistance of structures, followed by the discussion with the host supervisor. With additional research concluded by the trainee, a joint paper submission for the following conference Nordic Fire & Safety Days 2019 that will be held in August 2019 in Copenhagen, Denmark, will be made.

### **PART 2 – Numerical reinforced concrete material model development for the PEF analysis**

This part of training will include material model development for the use in numerical simulation of seismic response of structures. The model will be defined in a simulation program at a given choice of the trainee (ANSYS, ABAQUS, .etc.). Consultations with the supervisor will be provided at a daily basis. The model should be able to incorporate the physical behaviour which is expected in the PEF analysis, such as strength and stiffness degradation due to cyclic deformation.

### **PART 3 – Presentation in a joint meeting with guests from other universities**

A trainee will be asked to present their research at a joint meeting with other guests and hosts from the department. It would be a good opportunity for guests to get to know each other and receive feedback on their research.

### **PART 4 – Visit to the mechanical and fire lab at DTU**

As part of the exchange experience, a trainee will be guided through the mechanical and fire lab at the Technical University of Denmark, where the information on the equipment, measuring devices and the ongoing research will be presented.