

## **Exchange of experts EU proposal November 2017 (Arnhem Group)**

### **1. Subject of the exchange**

The main subject and reason for the exchange is the sharing of expertise and experiences about practical research in favour of the fire service.

Secondary it is the aim of the exchange common interests in this kind of practical experiments and to enhance collaboration, with the ambition to setup an international collaboration and program.

In 2016 a Exchange of experts proposal was granted, and 21 participants from different countries were able to meet because of this Exchange of Experts. The report of this meeting was sent to THW directly afterwards. During the meeting participants exchanged their research programs, and came up with 8 common topics of interest to work further on. Furthermore, they exchanged knowledge on specific subjects and participated in the FSS conference, which was incorporated in the Exchange program. A solid network was created, and the participants made agreements on organizing exchange of expert meetings on the common subjects. Finland already filed a proposal on “occupational health”. At the moment a proposal within the scope of H2020 is written for a pan European network for knowledge exchange for the fire services in Europe. The working packages for this pan European network are derived from the 8 topics defined during the Exchange of experts in 2016, and most of the participants have already promised support and participation if the proposal is granted. In this way we can conclude that not only in the eyes of the participants the meeting was a great success, but a real network is formed and there are great results within a year notice.

The participants wish to continue the network, and meet every year to exchange experience, knowledge and make new plans for cooperation. This proposal is a follow up of that plan: a meeting in November 2017 in which again the FSS conference is integrated.

Explanation:

Practical fire experiments are being carried out in some of the EU countries, but experiences and results as well as the objectives and programs are not shared. It is known from individual casual contacts that in Finland, Belgium, UK and Germany some small scale experiments have been carried out or are planned to be carried out. As far as we know, only in the VS and The Netherlands practical real scale fire experiments are being performed on a larger scale. To carry out these kind of experiments requires not only a lot of theoretical knowledge, but also a lot of practical experiences how to equip e.g. an experimental setup, which sensors to apply etc.... these experiences are rarely exchanged. This is the first aim of the exchange.

Secondly it appears that a lot of computer simulation models like CFD require parameters that are produced by practical experiments. The question is: how can we carry out the practical experiments in a way that also profits simulation modelling and vice versa?

Practical experiments are very expensive. It would be profitable to exchange programs and collaborate where possible so that experiments are not unnecessarily duplicated.

### **2. Benefits of the exchange**

The benefits are to learn from experiences in the member states regarding practical experimenting, getting to know what the programs and objectives for practical research are in the different countries are, and also synchronizing efforts to focus research in this field.

### **3. Results**

1. participants have exchanged practical experiences regarding equipment for field experiments
2. participants have knowledge about their mutual research programs
3. participants can find collaboration in carrying out field experiments
4. member states can collaborate and have insight in each others research programs

5. member states can make proposals for collaboration in experiments
6. insight in possibilities to combine Fire Safety Engineering simulation models with practical experiments.

#### **4. Number of experts**

About 20

#### **5. Preliminary list of experts to invite**

1. Marko Hassinen – Finland
2. Tobias Pflüger - Frankfurt, Germany
3. Karel Lambert – Belgium
4. Roland Goertz - University of Wuppertal, Germany
5. Robin Zevotek - UL, VS
7. Brian Neat, UK
8. Jim Glöcking, FPA, UK
9. Dennis Lemeshevskiy, Institute for Command Engineers, Belarus
10. Roman Ratushnyy, Lviv State University of Life Safety, Ukraine
11. University of Gent, later to be added
12. Martin Thomsen DK
13. Mikkel Bohm, DK
14. Lotta Vylund, SP Research, SE
15. Stefan Svensson, Lund University, SE
16. Marcus Runefors, Lund University, SE
17. Anna Figueras, Catalonia University for civil protection
18. Sergei Pozdejev, Cherkassy Institute named after the Heroes of Chernobyl, Ukraine
19. About 6 Participants from The Netherlands Fire Service Academy

#### **6. Time period for the exchange**

The exchange is planned from of November 6<sup>th</sup> until and with November 10<sup>th</sup> of 2017 in Arnhem. The international FSS conference is included in the exchange.

#### **The preliminary program:**

Day 1: Update on developments in research projects by all participants organizations

Day 2: Presentations of recent research

Day 3: Exchange knowledge: FSS conference

Day 4: Exchange knowledge: FSS conference

Day 5: Closing and network event