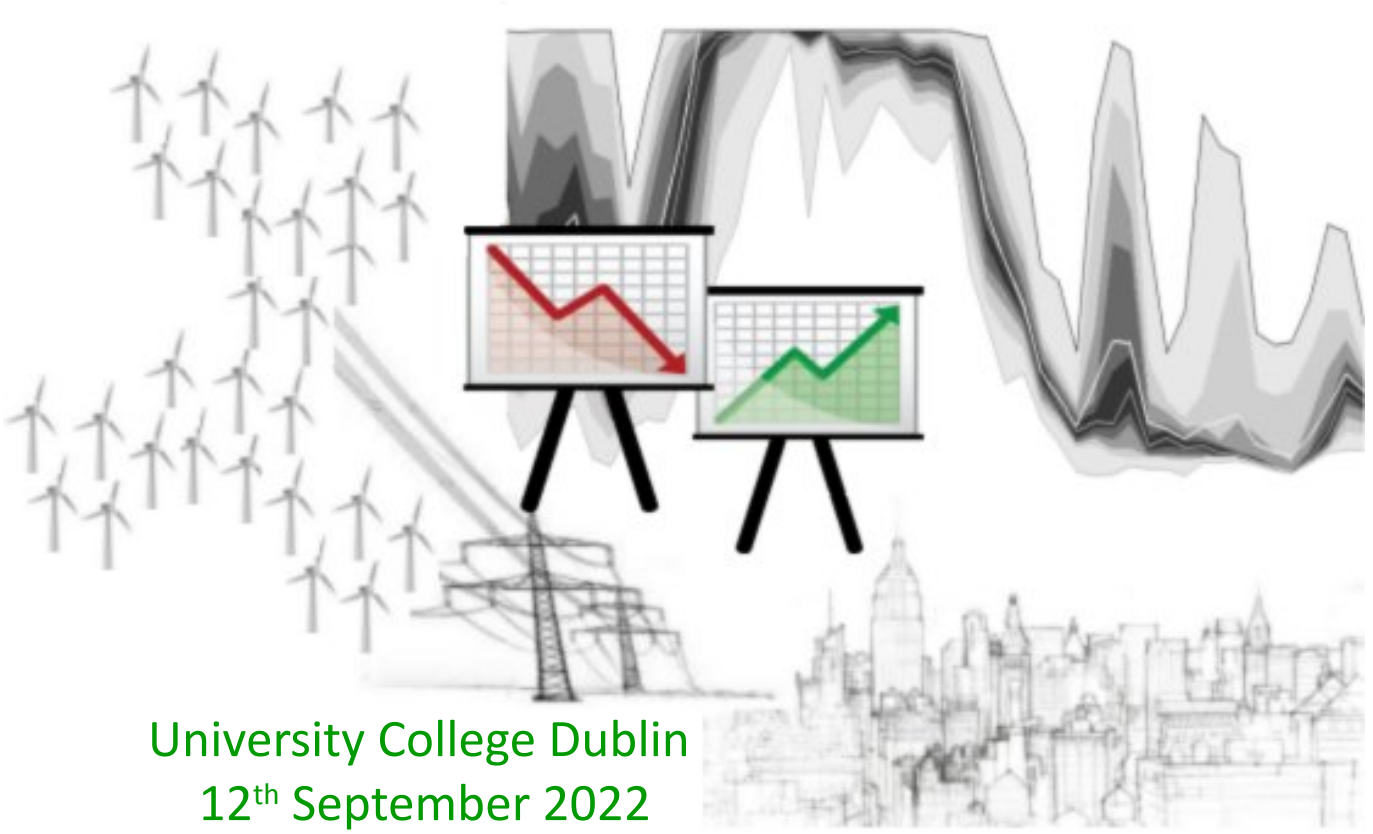
IEA Wind Task 51
"Forecasting for the Weather-driven Energy System" State-of-the-Art Workshop

Open Space Discussion

Extreme Events in the Power System



University College Dublin

12th September 2022

IEA Task 51 Open Space Workshop on

Extreme Events in the Power System

Organised by:

C. Möhrlen — WEPROG

J. Zack — Meso Inc.

Time	Activity
15:30 - 15:55	Keynote on Extreme Events by Conor Sweany (UCD) and David Leneghan (NationalGrid)
15:55 – 16:00	Introduction to the OpenSpace Principle and Topics and
16:00 – 16:35	OpenSpace discussions in **5 groups** - participants rotate free among the groups
16:35 – 17:00	Group leaders provide summary of each group to the full group; full group discussion

Open Space Workshop: How We Run It…

Principle	Meaning
Whoever comes is the right people	CHANGE group whenever you think you have said what you wanted or you are no longer interested in the discussion
Law of two feet	You can contribute on any discussion, use this opportunity!
When it's over, it's over	We stop after 30 minutes…use the time to tell about your ideas!
Whenever it starts it starts	Whenever you come to a discussion it is OK to engage and participate
Whatever happens is the only thing that could have happened	No matter who and what is discussed regarding the topic, it's good. Leave if you no longer like the discussion!

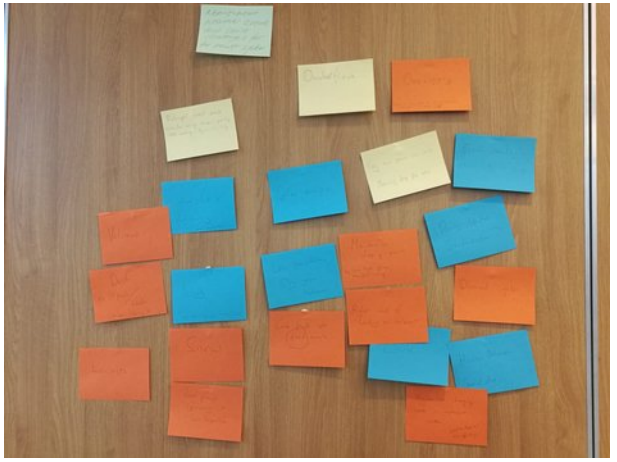
Introduction to the Open Space Topics

Topic #	Title
1	**Extreme weather events relevant for the power system** - Is forecasting for each type of event adequate for operational use at present? - If not, what is the most significant issue? - What research needs to be conducted to meet the operational needs?
2	**Non-extreme weather events that cause challenges for the power system**
3	**Correlation type events** where e.g. the behaviour of wind or solar generation negatively correlated with changes in demand
4	**Mitigation methods in extreme events** - known methods and unresolved challenges
5	**Future extremes** - events that we do not see yet, but may have to expect in the (near) future

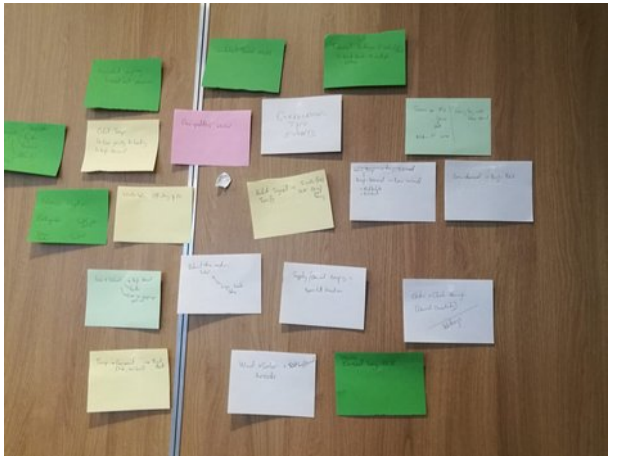
Results of the Open Space Topics

Topic #1
Extreme events for power system

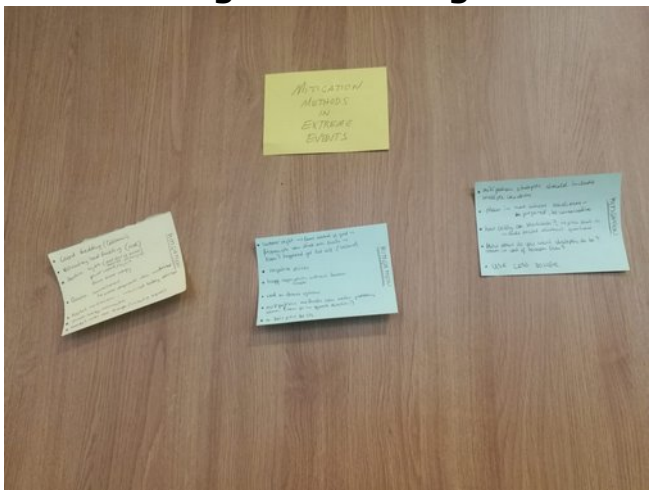
Topic #2
Non-extreme weather events causing challenges



Topic #3
Correlation type events



Topic #4
Mitigation Strategies



Topic #5
Future Events