Very good initiative! From the perspective of a European Forest Risk Facility that is hosted by European Forest Institute we welcome the statement of Commissioner Christos Stylianides, indeed we support his call for more cooperation and prevention, hand in hand with adequate response to disasters.

However, when it comes to wildfires, there is only one concern: it might have the wrong focus. Public attention concentrates on what? The bigger fleet of bigger water bombers. Media coverage of the commissioner's speech so far, neglects his second point, the prevention. The suppression and fire control message is gaining most of the attention (see for instance article "EU plant besseren Schutz gegen Naturkatastrophen" in *Die Zeit*)

In that light I would like to elaborate a little bit. This, based on experiences from around the world.

Large wildfires can only occur after a combination of three things, happening simultaneously:

- an ignition source,
- severe fire weather and,
- a large contiguous accumulation of fuel.

Remove any of these three and you will not have a large wildfire.

Mankind obviously cannot control the weather, nor can people hope to eliminate all possible avenues of ignition. The only factor we can control is the large contiguous accumulations of fuel. Therefore, broad scale fuel reduction burning (or grazing, mulching, mowing, converting to productive, valuable forest) is the only defense we have against large wildfires. This will not prevent fires occurring, but it will ensure fires are less intense, are easier and safer to control and will do less damage.

In the "response mode", to be consequent with the suppression approach, should we employ an army of firefighters permanently in the forest throughout the fire season, day and night? Would they be so numerous, and so well placed, that any fire that started could be attacked and suppressed within minutes of starting? Given that a fire in dry fuels, under quite normal summer weather conditions, can escalate from a spot fire to a crown fire in about fifteen minutes, I would estimate that the number of firefighters needed to cover the areas at risk would need to be of the order of 4 million men and women…..or more?

The calls to increase the fleet of aerial water bombers, specifically the "Very Large Air Tanker" (VLAT) is prominent in the statement. Water bombing aircraft are also popular with uniformed firemen who dominate the emergency services, the ultimate expression of "wet firefighting". Wet firefighting means fighting fires with water; uniformed firemen everywhere have been trained to know that this is the only approach. The water bomber is thus often perceived as the best option.

The calls for investment in more and bigger aerial water bombers are usually louder than those for effective pre-emption of wildfire damage. Every experienced fire fighter in Europe (and Australia and in the USA and Canada and South Africa, etc.) knows that about the deficits of water bombers when controlling an intense wildfire.

Consider these factors:

* Firstly, because of atmospheric turbulence and smoke, the water bombing aircraft cannot get to the seat of a rampaging forest fire;

* Secondly, in tall and dense forests, the water drop is often unable to penetrate the canopy sufficiently in volume to make a difference – it is intercepted by the tree crowns;

* Thirdly, water bombers cannot (or do not) operate at night and under high winds, the very preconditions for most damaging forest fires;

* Fourth, water bombing is extremely dangerous for the aircrew; aircrafts are operating at low altitude, in uncontrolled airspace with poor visibility. It is only a matter of time before a shocking accident and an aircrew fatality.

* Water bombing can also be dangerous for people on the ground. If a very large air tanker makes its drop only marginally too low, the huge tonnage of water is capable of smashing houses and vehicles and killing firefighters;

* Fifth, water bombers use vast quantities of fresh water, probably one of the most precious resources in a climate change future, especially in in the Mediterranean where reservoirs and ground water aquifers are drying up. Sea water could be used, provided the tankers have access to it, but dropping salt water onto catchment areas or farmland would only add to the problems caused by the fire.

This reminded me of the words of Stephen Pyne, the world's foremost wildfire historian and commentator:

"Air tankers are primarily political theatre, and only secondarily part of fire control. They have their place. But they dislodge attention from truly effective measures" (see recently published story on Euronews, http://www.euronews.com/2017/11/21/portugal-in-the-line-of-fire)

Please reexamine initiating a publicly funded program that is so costly and instead consider other more sustainable alternatives.

Here´s the deal. Every € that is spent on improving firefighting is matched with a € for prevention, mitigation, training, exchange and cooperation. Yes? Good idea? Do we have a deal?

Statement by Alexander Held, EFI Resilience team, also based on input from Western Australia