



***Call to Action:  
The EU Needs  
A Fire Safety  
Strategy***

***“Whether they occur in private or public premises, fires cause heavy economic losses to property, contents, personal belongings as well as serious disruption of public services and economic activities. More importantly, many of these fires claim lives.”***

European Commission, Joint Research Centre, 2003

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# ***CALL TO ACTION: THE EU NEEDS A FIRE SAFETY STRATEGY***

**We, the undersigned organizations, are calling for the EU to work on a European Fire Safety Strategy to create a coordinated approach to fire safety in the EU. The strategy must ensure that new and renovated buildings across the EU are resilient to fires and that prevention programs and policies are coordinated amongst EU Member States.**

As a starting point we call on the Commission to set up an expert group on fire safety ensuring participation of a wide array of stakeholders from across the European Commission, Member States, civil society, the research community, and industry to map the issues, identify potential solutions, and draft a roadmap to achieve them. Comparable data collection, sharing of best practices, and setting a vision for Member States on fire safety could be the ideal aspiration for this group.

Fire safety is a major societal and safety issue. Despite the disparate data available on fires in EU Member States, figures suggest that there are at least 5,000 fire incidents each day in the EU'. For many of these incidents, a community, business or family is affected, often for several years, sometimes for life.

Fires have a more devastating effect on society and the environment than meets the eye. The impact of a building fire goes beyond the victims and the firefighters. Fires create pollutant gases, contaminate water, and have a serious impact on the health of citizens. In addition to property damage and the loss of goods from building fires, it is noted that many small and medium enterprises, and even city centres fail to recover from the impact of big fires.

Fires have changed significantly over the last decades, developing faster and becoming more hazardous. The introduction of more combustible materials in our furniture and other content causes fires in buildings to grow faster than ever before. Aggravating this rapid change is the evolution of Europe's built environment towards highly insulated airtight buildings with an increased use of combustibles within the building envelope and structure. Often such buildings have more open plan designs and utilise new methods of construction. The drive for sustainability plays a big role in these changes to our buildings but unless fire performance is considered as an intricate part of sustainability, buildings will be less resilient to their oldest threat – fire!

# Mapping of the policy areas presented in the case



***Fire Safety is an issue that affects many policy areas***



***WHY IT IS TIME  
FOR EUROPEAN  
ACTION***

## ***WHY IT IS TIME FOR EUROPEAN ACTION***

**Under the Lisbon Treaty, the EU has an obligation to guarantee its citizens' safety". Yet, until now, there has been no comprehensive approach to fire safety.**

The EU is working, mostly in an indirect and uncoordinated manner, on a number of issues that could have an adverse effect on the fire safety of buildings and occupants, yet fire safety is rarely a consideration when these policies are developed. In fact, almost a third of the European Commission's key departments - known as Directorates General - have scattered legislation or responsibilities that affect fire safety.

These include:

- Better regulation
- Correct functioning of the internal market
- Consumer protection
- Single market
- Circular Economy
- Sustainability
- Energy efficiency
- Environment
- Occupational hazards
- Employment rights
- Accessibility and evacuation
- Education and awareness
- Health and safety
- Tourism safety
- Disaster prevention
- Emergency services
- Economic impact
- And more...

A mechanism needs to be put in place to ensure that fire safety has a seat at the table in future policy making. The European Commission must work with the European Parliament, the European Council, Member States and stakeholders from across Europe to develop a Fire Safety Strategy to ensure a sustainable and fire safe European Union.

***“Fire safety is not part of the equation when the EU is drafting policies that are changing the way buildings are equipped, constructed, and the materials being used to build them. Fire safety must have a seat at the table in future policy making.”***

Fire Safe Europe, 2016

***LINKING THE DOTS:***

***FIRE SAFETY***

***IN EU POLICIES,***

***REGULATION AND***

***LEGISLATION***



## ***BETTER REGULATION FOR THE SAFETY OF EUROPEAN CITIZENS***

**First Vice President of the European Commission, Frans Timmermans has committed to** drive significant reforms for better regulation in the EU.

**Yet,**

- *The EU is introducing directives and regulations that adversely affect fire safety in buildings.*
- *Fire-related building regulations are inconsistent from country to country across the EU.*
- *Construction product testing protocols for fire safety are not continuously evaluated in relation to risks emerging from new construction trends as well as new threats, such as wildland fires. As a result some are outdated. Regulation cannot be considered 'better' if it does not address the risks EU citizens may face.*

The patchwork of measures at national level and varying degrees of safety should be addressed by better regulation. Better and more consistent regulation means a coordinated approach amongst Member States, and the process towards harmonisation and standardisation of construction products must keep up with, and encourage, innovation.

Given that building practices differ between Member States, it is recognised that it is the responsibility of Member States and its municipalities to introduce and enforce building regulations including requirements for fire safety. As a result, the European Union does not have a common regulatory framework on fire safety of buildings. However, the European Union should define fire safety performance targets for buildings to ensure that neither EU nor national regulations inadvertently reduce the fire safety of its citizens. This would also provide the vehicle for a coordinated approach to ensure a minimum level of fire safety performance in buildings to safeguard the daily security of all Europeans no matter where they are.

***“If you don’t understand or know your enemy it is very hard to fight it efficiently. Fire is our enemy and we need appropriate full scale testing to understand fire behaviour of modern building materials and components.”***

*Pieter Maes, Brussels Fire Fighter and CFBT Trainer on Fire Behaviour*

## SAFETY AND TRANSPARENCY OF CONSTRUCTION PRODUCTS

**DG GROW** is responsible for the Construction Products Regulation (CPR) and should safeguard the safety of use and free circulation of construction products and systems and “improve the range, quality, and competitiveness of products and services on the internal market”<sup>iii</sup>.

*Yet,*

- *Although the fire testing and classification system, mandated by the Construction Products Directive (CPD) in the 1990s, and later the Construction Products Regulation (CPR) in 2011, is in force, there is no mechanism to ensure that it continues to represent how all products will react in real-scale fires. The construction products industry is developing rapidly so it is crucial that the fire testing and classification system keep pace with the real risks of a changing construction landscape.*
- *The CPR does not test or even set tolerance limits for toxic smoke hazards, which is responsible for more than half of fire-related fatalities<sup>iv</sup>. Firefighters are particularly concerned about increasing smoke levels in building fires because smoke is toxic, can be flammable and can provide a highway for fire to spread rapidly. There has to be a stronger focus on the role of smoke in fire safety.*

**DG JUST** through its EU Consumer Policy Strategy has responsibility to empower EU consumers through choice, information and awareness of consumer rights. It recognises that “many EU policies directly affect consumers”<sup>v</sup> and therefore it has the objective of safeguarding and integrating the interests of consumers into EU policies.<sup>vi</sup>

The fire safety of construction and fire safety products represent a crucial aspect of consumer protection.

*Yet,*

- *Given the weaknesses of the EU’s testing protocol for construction products, consumers who buy finished buildings may be exposed to unreasonable risks from fire and cannot be expected to have all of the information at hand or the expertise to make informed decisions around which product or system should be used in their building.*
- *There is often no control over what is installed during the construction of a building or if these materials are installed properly. It is not unusual for specified products to be replaced at a construction site or for products to be installed incorrectly. The results of this could be potentially fatal.*

***“Many building codes are decades old and yet to benefit from modern fire suppression systems”***

European Fire Sprinkler Network

## **FOSTERING THE SINGLE MARKET WITH FIRE SAFE PRODUCTS**

**DG GROW** has responsibility to ensure the free movement of goods within the EU market, and to set high safety standards for consumers and the protection of the environment.<sup>vii</sup>

**Yet,**

*- Different testing methods are still used in different Member States for some construction products and services. This leads to costly and extra testing, forms a technical barrier to trade and creates huge disadvantages, particularly for small and medium businesses.*

## **FIRE SAFETY SHOULD BE AN INTEGRAL PART OF THE CIRCULAR ECONOMY**

**DG ENV** has established an ambitious agenda to transform the EU economy into a circular one, “where the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimized...to develop a sustainable, low carbon, resource efficient and competitive economy”.<sup>viii</sup>

Under the Construction and Demolition waste section of the Circular Economy Package, the European Commission will take action to ensure the recovery of valuable resources and appropriate waste management.<sup>ix</sup> In this context, the Commission is also developing an EU framework of core indicators for the assessment of the environmental performance of buildings.<sup>x</sup>

**Yet,**

- Fire safety has not been mentioned. Fire safety must be a core indicator for building performance in a circular economy, especially when it comes to the endurance and life cycle of that building and the construction products utilised. Improved fire safety makes a building more resilient and offers more opportunities for multiple uses, for example, transforming an office building into apartments or converting a storage area into a children’s playground.*
- Fires are a threat to all the efforts going into the circular economy and life cycle of buildings. A product or building can be damaged or destroyed quite quickly if engulfed by fire, creating non-recyclable waste and destroying valuable resources.*

Moreover, with a view to the objectives of **DG ENV**'s Circular Economy Package, the need for fire safety measures to be sustainable becomes even more urgent.

**Yet,**

*A science-based approach is needed to avoid the toxicity and ecotoxicity problems associated with materials or additives (including flame retardants), while ensuring fire safety. At present there are no robust methodologies available to combine the exposure risks (cancer, endocrine disruption, developmental disorders etc.) of harmful chemicals with the more immediate life safety risk of fire.*

***“Sustainable fire safety must take into account potential health and safety risks related to the exposure to hazardous additives like flame retardants in furniture during the entire life cycle of products.”***

Markus Wiesner, President, European Furniture Industries Confederation (EFIC)

## ***BUILDINGS THAT ARE ENERGY EFFICIENT SHOULD BE FIRE SAFE***

It might seem natural to assume that modern, more energy efficient buildings are likely to be more fire safe than their predecessors. The benefits of EU legislation supporting massive renovations are positive steps in the challenges of urbanisation and growing population. However, the reality is that the design of a building and the materials used in its construction can increase its inherent fire load and dramatically change the way fire propagates.

**DG ENER** aims to promote “sustainable energy production, transport and consumption in line with EU 2020 targets”<sup>xi</sup> through a number of legislative tools including the Energy Performance of Buildings Directive (EPBD) and Energy Efficiency Directive (EED).<sup>xii</sup> Both contain measures that have a direct impact on the fabric of buildings.

**Yet,**

*- Fire safety has not been taken into account in the EU's efforts to modernise and reduce the energy consumption of the European building stock. Any initiative on energy efficient buildings should not compromise fire safety on these new or renovated structures.*

## UNWANTED FIRES HARM THE ENVIRONMENT

**DG ENV**'s Environment Action Programme to 2020 aims to safeguard the health and well-being of citizens while protecting the EU's natural capital. One of its nine objectives is to make 'the Union's cities more sustainable'<sup>xiii</sup>.

**Yet,**

- *While fires severely damage the environment, they are not being addressed in DG Environment's policies and legislation.*
- *Unwanted fires are environmental hazards that transcend borders and have a long-lasting impact on the health of citizens and their environment.*

- Fires cause massive amounts of air pollution, contributing to atmospheric particulates and nitrogen oxides (responsible for 403,000 deaths in the EU in 2012).<sup>xiv</sup>
- During firefighting, harmful effluents are contained in run-off water and ash. The treatment of contaminated remains, most frequently by burial in landfill – is also bad news for the environment.
- The loss of materials in a fire negatively impacts progress towards sustainable resource management as it depletes materials and significantly increases carbon emissions.
- Research has found that annual emissions of unburned particles from building fires in Sweden are “of the same order of magnitude as the total emissions from all commercial transport in that year”.<sup>xv</sup>
- Further studies found warehouse fires in England and Wales caused “135,000 tonnes of CO<sub>2</sub> to be released into the atmosphere annually; equivalent to the emissions resulting from the annual domestic electricity consumption by a city the size of Portsmouth [population 269,593]” while “carbon dioxide emissions and water used in fire-fighting were valued at £11 million per year”.<sup>xvi</sup>

**Yet,**

- *As urban development continues to spread into wildland areas and climate change increases the occurrence of fires – even to land previously not at risk – the threat of what are known as ‘wildland-urban interface fires’ needs to be addressed by the EU in building regulations as well as in testing protocols for construction products.*

***“One source of pollutants, that has until now been spared scrutiny in terms of its environmental impact, is fire.”***

SP Fire Research

## ***BUILDINGS THAT ARE NOT FIRE SAFE LEAD TO DANGEROUS WORKING CONDITIONS***

**DG EMPL** has over 25 related Directives issued to cover categories of workplaces, workers or specific risk. For example, the 89/391/EEC Framework Directive aims “to encourage improvements in the safety and health of workers at work”<sup>xvii</sup> and includes principles related to protecting people from carcinogens at work and even general building requirements for workers such as fire exits.<sup>xviii</sup>

**Yet,**

- *Firefighters on the ground still don't have EU-wide rules, procedures, or best practices for the safety of fire and rescue service personnel. Across the EU firefighters have disparate guidelines and facilities to ensure proper clean up after a fire. In some EU Member States, after an incident, firefighters take their protective equipment home to wash, thus exposing children and other family members to carcinogenic soot particles. Very few countries have proper procedures and washing equipment to contain the spread of toxins after a fire. Strict measures to protect firefighters across Europe are urgently required.*
- *According to an American study, US firefighters are at high risk to be victims of testicular cancer, prostate cancer and non- Hodgkin lymphoma.*<sup>xix</sup>
- *There is no EU legislation recognising the connection between firefighting and occupational cancer, despite numerous studies showing a direct connection between firefighting and occupational cancer.*<sup>xx</sup>
- *Firefighters' ability to save lives and extinguish fires is undermined by the use of many modern building materials as well as combustible interior content.*

**DG EMPL's** Strategic Framework for Occupational Safety at Work aims to better protect the more than 217 million workers in the EU from work-related accidents and diseases.<sup>xxi</sup>

**Yet,**

- Distances to the closest fire exits in schools and hospitals differ widely between countries. For example, it is five times further to the closest fire exit in a school in Italy than in Germany.<sup>xxii</sup>
- The EU does not tackle fire safety during construction and renovation work. A fire in such a situation threatens the safety of workers and those living in parts of the building not being worked on - particularly if fire safety measures have still to be installed.

***“Studies show that up to 14 different types of cancers affect firefighters more than the public, and the toxicity of fire smoke is increasing due to the greater use of synthetic building materials and interiors.”***

Tommy Kjaer, Danish Firefighters' Cancer Association, 2016

## **FIRE SAFETY EVACUATION AND ACCESSIBILITY IN BUILDINGS SHOULD BENEFIT DISABLED AND OLDER PEOPLE**

**DG EMPL's** European Accessibility Act “aims to improve the function of the internal market for accessible products and services by removing barriers created by divergent legislation”<sup>xxiii</sup> to benefit disabled and older people in the EU. The EU expects that by 2020 approximately 120 million people in the EU will have multiple and/or minor disabilities.<sup>xxiv</sup>

**Yet,**

- This growing demographic of elderly and disabled people is not being considered properly in terms of ensuring the inherent safety of our buildings through better fire safety regulations. Higher turnovers of renting tenants, increasing rates of migration and larger numbers of elderly or disabled people living in shared buildings all impact issues of fire prevention, the importance of rescue service access, and the ability to evacuate people quickly and easily.

## ***THERE IS NO MINIMUM LEVEL OF FIRE SAFETY EDUCATION AND AWARENESS ACROSS THE EU***

**DG EAC's** Education and Training 2020 Framework “is a forum for exchanges of best practices, mutual learning, gathering and dissemination of information and evidence of what works, as well as advice and support for policy reforms.”<sup>xxv</sup>

**Yet,**

- *There is no minimum standard for fire safety education in schools across the EU, including proper behaviour procedures in case of fire.*
- *There is no annual sharing of information between nations as a way to learn and exchange knowledge about fire safety prevention and best practices.*<sup>xxvi</sup>
- *There are no awareness-raising campaigns for all EU citizens regarding fire prevention, fire safety, and proper behaviour in case of fire or another emergency.*
- *Arson is a major issue across EU countries, accounting for 40% of fires in Denmark<sup>xxvii</sup> for example, and there are no coordinated arson prevention programmes to address this threat.*

## ***FIRES HAVE A LONG-LASTING SOCIAL AND HEALTH IMPACT***

**DG SANTE** states that EU action is largely about promoting coordination between member governments, for example through guidelines or the sharing of best practice.<sup>xxviii</sup>

**Yet,**

- *The EU has no platform for Member States to share best practices or common guidelines to prevent fires happening. It has no basic guidelines or procedures for how citizens should equip themselves for emergencies involving fire.*

**DG SANTE** states that EU policy seeks to protect Europeans from serious health threats that transcend national borders and may be more effectively tackled by Europe-wide cooperation rather than by countries acting alone.

**Yet,**

- *About 70,000 severe fire-related injuries require hospitalisation in Europe each year.<sup>xxix</sup> And it is the young who suffer most. Worldwide, children make up 30% of injuries and fatalities caused by fire.<sup>xxx</sup> This is an unacceptable human cost that is reason enough to make fire-safety in buildings a priority across Europe.*



- The loss of life, the need for long-term burn treatment, the serious disabilities and long-term effects of toxic smoke inhalation are deeply traumatic for victims and their families. This may be further compounded by the stress and insecurity of losing a home or workplace, resulting in unemployment.

***“Fire safety is about measuring risk and managing that risk. The earlier in the process the fire sector is notified the better the chance of finding a safe and effective solution.”***

Fire Sector Federation

## ***A LACK OF MINIMUM SAFETY STANDARDS AFFECTS CONSUMER CONFIDENCE – EVIDENCE IN THE TOURISM AREA***

**The Commission’s Consumer Directorate** states: “Consumers expect to be able to purchase tourism accommodation services with confidence for their own safety and security regardless of their choice of accommodation or destination within the EU...”<sup>xxxI</sup>

Travellers should be granted a consistent and reasonable level of safety and security when they travel across Europe, whether it is when they are sleeping in a tourist accommodation for business or holiday purposes, and whilst participating in other activities associated with travel, such as visiting local sites and venues or participating in a conference. They expect their stays in tourism accommodation to be safe and secure. This includes the expectation that they will be alerted to a fire or other safety risk by means of an alarm and that they will be able to leave the accommodation building quickly and safely in the event of a fire or other such incident.”<sup>xxxII</sup>

**Yet,**

- “No specific horizontal legislation exists at EU level and no standard approach with regard to safety of tourism accommodation services is in place at national level.”<sup>xxxIII</sup>

The EU should ensure that Europe’s tourism accommodation achieves a minimum level of fire safety.

## ***FIRE SAFETY SHOULD BE AN INTEGRAL COMPONENT OF DISASTER PREVENTION***

**DG CIVIL PROTECTION**, under the EU Civil Protection Mechanism Structure, set up the European Emergency Response Capacity “to advance European cooperation in civil protection and enable a faster, better coordinated and more effective response to emergencies.”<sup>xxxiv</sup>

**Yet,**

- *Fire safety in buildings is not considered an emergency under this mechanism nor is there a coordinated approach to deal with the threats of intentional building fires, such as arson and terrorism.*
- *Terrorism is a growing threat across the EU. Large buildings are targets for fires and training amongst Member States could ensure an immediate coordinated response.*
- *“Following the terrorist attack on the World Trade Centre there is concern that the design of buildings no longer reflects current firefighting practices and that, conversely, firefighting practices do not reflect current building design.”<sup>xxxv</sup>*
- *There is no mechanism for cooperation amongst fire prevention departments in EU Member States, despite some of these units working under civil protection units.*
- *EU civil protection programs dealing with disaster prevention do not cover one of the most important aspects - fire safety.*

## ***IN CASE OF FIRE, CITIZENS SHOULD BE ABLE TO EASILY CONTACT EMERGENCY SERVICES***

**DG CNECT**, under the Universal Service Directive, makes sure that citizens are “able to call the emergency services free of charge [...] by using the single European emergency call number “112” and any national emergency call number specified by Member States.”<sup>xxxvi</sup>

**Yet,**

- *Less than half of EU-citizens know that 112 can be dialled in case of emergency anywhere in Europe.<sup>xxxvii</sup>*
- *Emergency calls are not located accurately enough. This may result in a considerable loss of time and have disastrous effects when a fire occurs.*
- *Public authorities are not able to inform efficiently the citizens about ongoing fires or upcoming threats.*

Even though emergency numbers are already available, the quality of emergency calls should be improved, so as to make sure citizens are better protected in case a fire occurs.

## **THE COST OF INACTION**

**DG GROW** “considers SMEs and entrepreneurship as key to ensuring economic growth, innovation, job creation, and social integration in the EU.”<sup>xxxviii</sup>

**Yet,**

- “The total economic costs of fires amount to around 1% of gross domestic product in most advanced countries”.<sup>xxxix</sup>
- “The British economy has lost £1 billion in GDP and 5,000 full-time jobs through preventable fires in commercial warehouses over the past five years. The cost is equivalent to the annual productivity of the entire UK soft drinks industry.”<sup>xli</sup>

**“The cost of inaction is a loss for the economy, the wellbeing of societies, and most important of all, a loss of lives.”**

Fire Safe Europe, 2016

**“Fire is currently costing countries of the European Union approximately 1% of GDP. [...] In comparison with road safety, crime prevention and industrial safety, little or nothing is being done to monitor progress on safety measures”**

Sir Christopher Prout MEP, 1994 in a Motion for resolution by the European Parliament <sup>xli</sup>

**NOW**  
*THE TIME TO ACT IS*

## ***THE TIME TO ACT IS NOW***

Europe is taking brave and ambitious initiatives to improve and secure a healthy and safe environment and future for European citizens but fire safety in building regulations are being overlooked. **That needs to change.**

Now is the time to understand the threats of fire safety in buildings and make the changes that will safeguard all EU citizens.

Across Europe, new regulations, revised directives and improved legislation combined with a risk-averse mindset and a growing appetite for building renovation offer the perfect opportunity to future-proof the fire safety of European buildings. **It is an opportunity that we must seize now.**

### ***OUR CALL TO ACTION: GIVE FIRE SAFETY A SEAT AT THE TABLE***

Fire safety must have a seat at the table in future policy making. The European Commission must work with the European Parliament, European Council and stakeholders across Europe to develop a Fire Safety Strategy for the European Union.

As a starting point we call on the Commission to set up an expert group on fire safety ensuring participation of a wide array of stakeholders from across the European Commission, civil society, the research community, and industry to map the issues, identify potential solutions, and draft a roadmap to achieve them.

As has been done in the past with the Road Safety Strategy, a Fire Safety Strategy could have a number of basic pillars that set objectives for the short and long-term. These would be developed in detail by an expert group and could include:

#### **SHORT-TERM**

**Collect comparable data and statistics amongst Member States** *Having comparable data will allow the EU to identify issues and risks*

**Encourage Member States to share best practices**

*Member states have valuable information on how they are preventing fires. Why not set up a mechanism to share them?*

#### **LONG-TERM**

**Set an aspirational vision**

*Once the EU has comparable data, it will be able to set a vision for member states to reduce fire deaths, injuries, and incidents. The EU will finally have a vision to improve fire safety in buildings!*

# *We call you to action!*

- **Fire Safe Europe Team, Chairs and Members**
- Tommy Baekgaard Kjaer, President, **Danish Firefighters Cancer Organization**
- Prof. Ivana Banjac Pečur, Head of Department of materials, **University of Zagreb Faculty of Civil Engineering**
- Phil Barry, Fire Safety Consultant, **CWB Fire Safety Consultants**
- Alan Brinson, Executive Director, **European Fire Sprinkler Network**
- Philippe Gruat, President and Chairman, **Frenche Precast Concrete Federation**
- Pieter Maes, Firefighter, **Brussels Fire Department and CFBT Instructor**
- Molly Maher, President, **Consumer Safety International (CSI)**
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- Brian G Robinson CBE, Chairman, **Fire Sector Federation**
- Peter Schellinck, Secretary General, **European Organisation for Technical Assessment (EOTA)**
- Steve Skarratt, Head of Prevention and Protection Training, **The Fire Service College**
- Benoît Vivier, Policy Officer, **European Emergency Number Association (EENA)**
- Marcus Wiesner, President, **European Furniture Industries Confederation (EFIC)**
- **Croatian Association for Fire Protection (HUZOP)**



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