

PRINCIPLES OF THE SINGLE EUROPEAN MARKET: INTEGRATING FIRE SAFETY AND LAW

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Abstract

Integrating the European market has represented a challenge for both technical and legal participants. Economic proponents of the single market combine a misunderstanding of the USA experience with a sometimes incorrect belief that technical tests are always adequate to ensure safety. The Kaprun disaster shows the problem of a mismatch between the desires of products and the capability of regulators. The unified market can create the problem that a product assembled from components that are underspecified may create new problems that are not captured by the regulatory system. This problem is especially aggravated when products come from producers with different technical cultures who may not understand the limitations of the regulatory test and assume that all products that pass the test are safe. Unless all parties in the regulatory process understand the limitations of the unified market and regulators retain their legal power and administrative role in safety it is possible to create disaster despite compliance with CE standards. One possibility is to refocus local regulators on the integrated safety of the completed building. Analogies to other EC directives suggest what may be a useful approach.

The “single European market” is both a product of the EU and a major rationale for it. But integrating the European market has represented a challenge for both technical and legal participants. The overall goal is to “harmonize” all regulations, guidelines, based in the ideology of the “freedom” of the market as absolutely far as possible.

A comparison with the USA is often made but without understanding several critical differences in the legal structure. Europeans are routinely told that the USA has a single market but this is not true at least the way Europeans use the term. Products and services in the USA can be described as either or both of federally regulated or State regulated. Federally regulated products such as aircraft, automobiles, pharmaceuticals and ships can in fact be sold anywhere. However products such as consumer electronics, building products, firearms and the vast majority of services are regulated at the state level. Many products can be sold in some states but not others. Fireworks, kerosene heaters, radar detectors and many other products are banned in some states. Virtually all building regulation is at the level of states or even smaller units of government. Services are even more divided. Physicians, engineers, lawyers, nurses, barbers and drivers are all regulated by states, with some states being very flexible and others being very rigid in admitting experienced practitioners from other states.

Even more important, every uniquely federally regulated product has a corresponding regulatory agency that pre-empt state regulatory action with regard to the product.

The USA multi level regulatory system has many complexities, but in no case does it try to regulate a single market in the way tried in Europe. The EU approach is “harmonization”, which is essentially both a method and an ideology. Differences among countries are not

viewed, as they are in the USA as expressions of a kind of local taste or even as a potential arena for experimentation, but as outliers to be stomped out.

It should be noted that this demand for uniformity was true even within countries. When Germany was unified there was a demand for uniformity that effectively crushed any deviations from the West German norm. There are even ideas to harmonize "the criminal code" presented by the European Commission f. ex. the 4th European Law Forum Vienna in May 2007.

Some areas have clearly worked. The Euro is a common currency. European contract law as well is one of the fastest developing areas in legal "harmonization". The question is always how to coordinate the different cultural phenomena in all the fields in all the countries.

A few cases, such as the shape of a cucumber or the make up of chocolate seem questionable and sometimes reality collides with ideology and it is recognized that harmonization may not make sense.

Unlike the USA with its establishment of specific regulatory agencies to control the federally regulated products the unification planning for Europe is based on the idea of a Commission Directive that requires the individual countries to enact legislation enacting the directive but without the creation of a responsible regulatory agency. Instead a giant committee structure coordinates, harmonizes and smooths out the differences. The ideologically driven structure may or may not be able to deliver safe products across a variety of legal systems. One of the biggest challenges has been the harmonization of the basic concepts of the English (Common) law and the "Continental Written Law" doctrines. The first step is normally to try to harmonize definitions so that suitable regulations can be created.

THE EU FIRE STANDARDS

EU fire regulations started to replace old national systems beginning in the year 2001. This has had effects on all decision-makers in the industry and all building users.

A BACKGROUND OF CONFUSION AND CONFLICT.

In the second half of the 20th century almost every country in Europe developed their own national system for fire testing and classification of building materials. More than 35 different national standards created confusion the consumers and the producers. Some standards were even conflicting as one material could be classified as hazardous in one country and safe in another country. It was unclear whether these represented differences in substance or merely testing.

TOWARDS HARMONISATION

The European Commission therefore decided fifteen years ago to harmonise the standards for testing and classification of all building products, intended for sale in the Union. Two sets of standards have now been drafted: One for Reaction to fire of materials and one for Fire Resistance of construction elements.

CEN CLASSES

Today, all over Europe we have national standards on 'Reaction to fire'. These standards were developed some 50 years ago when building materials were mainly wood, glass, stone and cement. They were not meant for testing the big variety of building materials used in the modern world. The European Community has now developed a new set of standards that can also be used to evaluate today's building materials. The 'Reaction to fire' classes test three properties of the building material: spread of fire, smoke intensity and burning droplets.

The idea is that these new standards will generate safety. But does all this is really “enough” for fire safety?? Or, in general for guaranteeing “safety”?

KAPRUN CASE

At Kaprun Austria in Nov 2000: 155 people died in a “Seilbahn” fire. The Seilbahn was built by major companies and complied with all regulations yet there was still a disaster.

The fundamental problem was that the designers complied with the regulations for a “Seilbahn”. However the seilbahn regulations were designed for a “box on a string” not a train in a tunnel. Both were pulled by a cable or “Seil” so the regulation classified both systems as seilbahn, even though they were obviously totally different hazards. As a result there were no emergency exists, or lights or planning or a method to pull the burning train out of the tunnel. No one thought about a fire nor did regulators ask anyone to think about it.

The Austrian criminal law recognizes homicide as criminal even by failing to take a safety precaution. However the criminal legal proceedings took a number of years and ended in a finding of no responsibility by any of the parties. This decision by the court was based on a very narrow view of the responsibility of the designer and regulator. However the court seemed to focus on the need for a deliberate wrongful act which the person knew could cause harm rather than the effect on the victim of the actions of a designer who created a dangerous design and did not understand what he had done. In other words if a system is such that no one really understands it, no one is responsible for it.

The decisions of the courts in Salzburg trial court and Linz appellate court holding that no one was responsible have confused many of the victims’ families and the media and the public.

Now it is often in such a case that, at least, judgements spoken in the name of the “people” cause problems because juridical logic and conclusions do not correspond to public perceptions. The way the public sees it companies have obligations to take care to create safe products, not merely comply with the law. The obligation to take care is often not specific but general. They believe that a person who leaves his baby unattended and this falls, e.g., from the window, the parents are responsible and are criminally responsible for the consequences (e.g., accusation because of negligent homicide). It does not require a specific “rule: don’t leave your baby near an open window.

Yet the defendants in the Kaprun case seemed to use exactly such a defense. The judges in Salzburg and confirming in Linz came to the decision that no criminal acts were demonstrated despite the obvious failure to take care. The defendants had complied with the regulations.

Total blind stupid reliance on an inappropriate regulation was a complete defence to the charges.

A horrible risk caused entirely by the design and construction of the technical system had slipped through the entire legal and regulatory system because everyone focussed on compliance with the regulation not whether the system was safe. Even though this disaster was an Austrian national regulatory failure the lessons from Kaprun should be sobering for anyone who thinks you can regulate complex systems with advanced directives.

The legal scholar who looks at the construction product directives finds this *Kaprun* problem to be obvious. One looks in vain in the directive for any statement that assures the public that the buildings will be safe. The total focus is that producers can sell product anywhere despite the concerns of regulators. The key effort appears to be to tie the hands and feet of the regulators who might otherwise be protecting the public from the kind of people who built the Kaprun Seilbahn.

Disastrous fires are the consequence of technological decisions by designers and builders and permitted by regulators. Some politicians have even tried to claim that such disasters are tragic unpredictable events. EG **Kismet as an inevitable gottgebenes destiny!**

This is of course ridiculous. In the case of manufactured disasters such as Kaprun a regulatory system has to be created to guard the public.

LESSONS FROM KAPRUN

- 1) Even major companies will do only the exact minimum required by regulation.
- 2) Simple products can create extremely complex risk systems.
- 3) There is no guarantee that the creator of a product will understand the risks.
- 4) Compliance with general regulations will not guarantee a safe outcome.

REGULATING CONSISTENT WITH THE SINGLE MARKET

The goal is therefore to create a Fire safety regulatory system consistent with the directives for a single market. Beier and Brannigan have made a proposal in the past to regulate fire safety in historic and cultural property buildings that has features that could be used to create a fire safety regulatory system consistent with the single market.

Historical and cultural property is interesting both because it is often exempt from codes for many reason and because normal fire codes do not protect the cultural property but only the people.

Beier and Brannigan therefore proposed that every Cultural and historical property shall have a fire protection plan which is made part of a legally enforceable agreement with the appropriate Fire police . The plan would describe in detail the measures to be taken to avoid the ignition, extension and establishment of fire and to minimize the effect of fire. A fire safety controller in the organization shall be responsible for enforcement of specific requirements.

This proposal can be adapted to major buildings covered by the Construction products directive. It is completely consistent with the single market that every building that represents a substantial public risk of fire be required to have a suitable risk analysis and fire plan approved and enforced by the local fire authority. One aspect of the plan that we introduced was the idea of the *Internal Controller*. The internal controller is based on the concept introduced in the Directive on Data Protection. This directive can be used as a direct analogy to the construction products directive. Both are designed to generate a single market consistent with protecting the public.

Article 18 of the European Data Protection Directive allowed the authority having jurisdiction to appoint a company official as an Internal Data Protection Controller. That person is responsible in a “*performance*” or “*results oriented*” manner for the technical compliance of the system with the goals of the data protection law and the EC directive. It is thus completely consistent with the single market. In every case the data protection controller must analyze and take into account the specific local technical problems that are a product of the company's operations. The controller is directly responsible for certifying compliance to the authority having jurisdiction. Drawing on that experience the follows concept for an internal fire protection controller to enhance and demonstrate the safety of the system.

A Fire protection plan shall be created by suitably qualified persons after consultations with local officials. It shall be in the form of an agreement enforceable by the authority having jurisdiction. Clearly it will be the responsibility of the building designer and later the operator to engage qualified people to analyze the safety of the building and propose an adequate response plan. The plan shall state:

- 1) The organization will have an irreducible obligation to comply with the plan.
- 2) Compliance with the plan will be enforced within the organization by the fire safety controller.
- 3) The plan shall identify those *managing officials* who are personally responsible for ensuring the organization compliance with the fire safety controllers orders and who may appeal the decisions of the *fire safety controller* to the AHJ.
- 4) The plan shall include an analysis of hazards to both life and property and details of suitable responses. The plan may specifically accept hazards to life and property which cannot be remedied, but such hazards will be specifically indicated.
- 5) Any proposal to use Staff in a fire fighting role shall analyze the safety of such use.
- 6) The facility shall not be open to non emergency staff unless it is in compliance with the approved plan.
- 7) The plan shall specifically address known *special hazards*.
- 8) The plan shall describe the provisions made for maintaining any technical controls related to fire safety, including ignition sources, *fire load* and *operational controls*.
- 9) The plan may specify minor deviations that may be approved by the fire safety controller. Major deviations must be approved by the AHJ.

- 10) It shall contain suitable language binding the organization and all employees and agents to comply with the plan and accept any court order to comply with the agreement.
- 11) Buildings which represent a common fire safety hazard should have a single plan even if multiple organizations are involved.

Fire safety controller is an individual(s) qualified by training and experience and personally approved by the authority having jurisdiction. The Fire Safety controller must have:

- 1) The authority to make binding agreements with the Authority having Jurisdiction which relate to the plan.
- 2) The authority to direct any person or operation in the building to cease operations or activities that in the judgment of the Fire safety controller ignore the letter and the spirit of the plan or otherwise constitute a hazard.
- 3) An agreement that no one in the organization is permitted to overrule the fire safety controller except with the concurrence of the Authority having Jurisdiction.
- 4) Placement in the organizational decision system so that no decision relating to fire safety is made without review by the controller.
- 5) Adequate protection against retaliation for decisions.
- 6) The right to supervise training in compliance with the plan.
- 7) The right to inspect any location or object that might cause a violation of the plan.
- 8) Approval by the AHJ as to both appointment and dismissal.
- 9) The same person may be fire safety controller for more than one organization provided that each organization is guaranteed adequate staffing to perform the function.

Authority having Jurisdiction

- 1) Shall have authority to approve plans that adequately protect both people and property (if desired) from unacceptable risk.
- 2) If any proposed plan is rejected clear reasons shall be given.
- 3) Temporary plans may be approved for up to one year to allow adequate time for consultation.
- 4) Shall review every appointment of fire safety controllers to determine that the controller has adequate training and experience to enforce the specific plan for which they are responsible.

- 5) Issue suitable certificates to fire safety controllers. A certificate shall be issued for each plan.
- 6) Shall review decisions of the fire safety controller on written appeal by a managing official.
- 7) May review actions by fire safety controllers and organizations and for good cause may revoke controller certificates or plans.
- 8) Shall review any dismissal or adverse discipline of any fire safety controller. The organization shall have the obligation of proving good cause, and that the dismissal or discipline will not appear to be motivated by the proper actions of the controller.
- 9) May designate experts qualified to create plans and set formats and requirements for such plans.

OFFENSE

It shall be an offense:

- 1) To operate the building or site in violation of the plan or without a plan in effect. Every managing official is charged with knowledge of the plan. If in doubt they must consult the fire safety controller or the AHJ. It shall be a full defense to any charge that they acted in full accord with the interpretation by the fire safety controller.
- 2) For any person in or near the building to act in violation of the plan. Persons not employees or managing officials shall receive warning by any reasonable means of their obligations.
- 3) For any employee to fail to report violations of the plan or to interfere with the fire safety controller either directly or indirectly.

The core idea in developing society and in the legal system is to deal with all these technological developments. As a practical matter trying to protect public safety with advance laws and directives is inadequate to the nature of technology and we have to argue that it is not possible to refer to legislation, to define problems and give solutions:

The responsibility of the designer or builder has to be focussed on the need for systems engineering and acceptance of responsibility for the ever unfinished and different factual situations.

CONCLUSION

A single market based on fire safety tests and standards will not generate adequate social safety as long as the Kaprun problem exists. Designers, builders, operators and regulators must work together to generate truly safe buildings, not just buildings that comply with the code and are disasters waiting to happen. New regulatory approaches are needed, in conformance with the single market, to protect EU consumers!

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