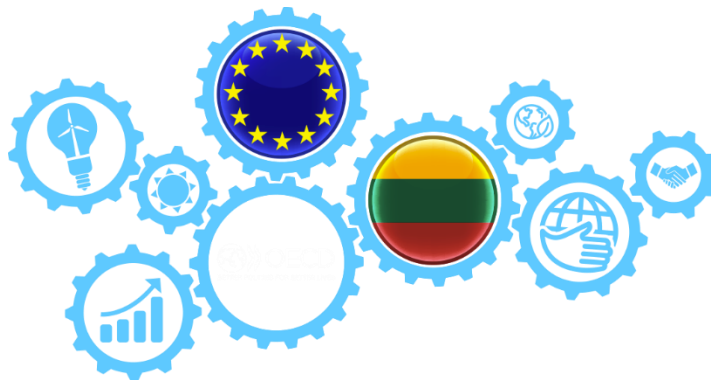


INCREASING THE EFFICIENCY OF THE LITHUANIAN CONSTRUCTION SUPERVISION SYSTEM

Output 1: Report on the role of liability and insurance requirements and other measures to support compliance and risk-management in construction through market mechanisms



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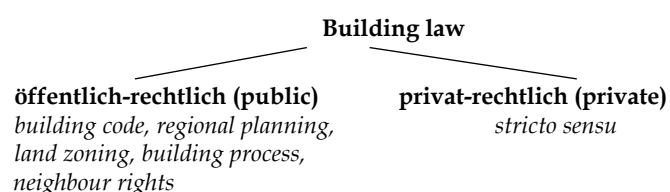
Activity 1.2

Benchmarking of relevant international experience and recommendations

Case study I: Austria

Building law and building regulation

Pursuant to Article 15(1) Austrian Federal Constitutional Act (B-VG), the legislation in the field of building law and its execution falls into the independent sphere of influence of the Federal States.¹ In Austria, the building regulations and regulations regarding eligibility for state subsidies are subject to the state legislation, so there are numerous laws and ordinances which are regulated differently from one state to another. There are therefore nine different building regulations in Austria. In 2008 most building codes were amended on the basis of a harmonization of technical prescriptions (OIB Guidelines, s. below).



OIB Guidelines²

Upon decision of the General Assembly of the *Austrian Institute of Construction Engineering³*, revised every 4 years, for the most part adopted in the building codes of the federal states.

The OIB Guidelines serve to harmonise the construction engineering regulations in Austria. The federal states may declare OIB Guidelines as binding in their building codes - in fact- all federal states did so by now. It is possible to deviate from the prescriptive rules, if it is demonstrated by comprehensible and conclusive arguments that the required level of safety is achieved. The possibility to deviate from prescriptive rules is intended to ensure the necessary flexibility for innovative architectural and technical solutions.

Table 1. OIB-Richtlinien

OIB-Richtlinien	Bezeichnung
OIB-Richtlinie 1	Mechanische Festigkeit und Standsicherheit
OIB-Richtlinie 2	Brandschutz
OIB-Richtlinie 3	Hygiene, Gesundheit und Umweltschutz
OIB-Richtlinie 4	Nutzungssicherheit und Barrierefreiheit ,
OIB-Richtlinie 5	Schallschutz
OIB-Richtlinie 6	Energieeinsparung und

¹ https://www.oesterreich.gv.at/themen/bauen_wohnen_und_umwelt/bauen/Seite.2260200.html

² <https://www.oib.or.at/de/oib-richtlinien>

³ Österreichisches Institut für Bautechnik → gilt als der Koordinierungsplattform der österreichischen Bundesländer auf dem Gebiet des Bauwesens

- **Austrian Construction Work Coordination Act⁴ (federal)**: It increases the safety and health protection of workers on construction sites in the preparation and execution of construction work.
- **Building Contractor Act⁵ (federal)**: Applies when unfinished apartment or business premises - not yet completed- is purchased and advance payments are to be made. It protects the buyer from the loss of payments already made in the event of the contractor's insolvency.
- **Civil Code and Commercial Code**: General rules with specific provisions for service and contractor agreements.
- **Trade Law or regulations for water or environmental assessment (federal)**: additional laws exist at the regional level
- **Austrian Consumer Protection Act**
- **Directive 2010/31/EU on the energy performance of buildings (EPBD)**,⁶: energy passes (providing information about the energy consumption of a house) are obligatory for newly constructed houses.

Construction professionals⁷

Architects⁸/Civil engineers/⁹“Ingenieurkonsulent – Ziviltechniker” (Chartered Engineering Consultants - including Architects or Civil Engineers)^{9,10}

“Ziviltechniker-gesetz” is the professional law for Architects and Chartered Engineering Consultants. The access to the profession is open to applicants with nationality of an EU/EEA-, WTO-country or Switzerland or other persons who are equalized on the basis of bilateral treaties. They serve Public security, Protection of Consumers and Recipients of Services and Protection of the Environment and the Urban Environment, including town and country planning. The professional regulation of the profession of Civil Engineers is based on the following measures aimed to guarantee a high level of protection for the public interest:

- Regulation of minimum requirements for professional access (degree + 3 years professional practice + professional examination)
- Specific organizational requirements for Civil Engineers companies which guarantee that professional decisions have to be taken by authorized Civil Engineers
- Mandatory membership in the Chamber.

⁴ BauKG (Bauarbeitenkoordinationsgesetz), <https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10009146>

⁵ BTVG (Bauträgervertragsgesetz) <https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10003474>

⁶ [https://content.next.westlaw.com/7-505-8935?_lrTS=20210224054538781&transitionType=Default&contextData=\(sc.Default\)&firstPage=true](https://content.next.westlaw.com/7-505-8935?_lrTS=20210224054538781&transitionType=Default&contextData=(sc.Default)&firstPage=true)

⁷ <https://www.beruflexikon.at/suche/?s%5B0%5D=270&s%5B1%5D=272&s%5B2%5D=271&s%5B3%5D=273&s%5B4%5D=274&s%5B5%5D=276&b=84>

⁸ <https://www.beruflexikon.at/berufe/2321-ArchitektIn/>

⁹ https://ec.europa.eu/growth/tools-databases/regprof/index.cfm?action=regprof&id_regprof=638&tab=pro

¹⁰ https://www.arching.at/ziviltechnikerinnen/die_ziviltechnikerinnen.html

- The role of Civil Engineers (as “Ziviltechniker”) is important for the official procedures of building authorities as they are professionals of public trust and carry responsibility.

“Baumeister”¹¹ (Master Builder¹² regarding planning)¹³

- Calculation and planning of building structures, traffic and underground structures and related structures.
- Construction management and project management for these structures.
- Installation of scaffoldings, which require knowledge of statics.
- Qualification is required by law only for the pursuit of these activities as a self-employed person or as manager according to the Austrian Trade Law.

Due to the complexity of the tasks which are performed under the responsibility of the professional individual as well as the important role of the profession in the building industry (planning, calculation and supervision of all kind of construction work from buildings to bridges, roads and tunnels), it is necessary to prove respective knowledge, skills and competences to ensure the health and safety of the client and other affected persons.

The prior check of the professional qualification of the service provider is necessary to avoid serious damage to the safety of the service recipient due to a lack of professional qualification of the service provider.

General contractors

In larger projects, general contractors commonly come together through an association, called ARGE (*Arbeitsgemeinschaft*). The general contractor is commissioned to do all the works required, either by himself/herself or through subcontractors and ensures compliance. The project manager and the construction authority supervise the construction works and report to the principal.

“Wirtschaftsingenieur”¹⁴ (*Industrial engineer*)

Producers of construction materials or individual experts

(Statisticians, in-house technicians, surveying technicians etc.)

Site manager

Checks/controls the building progress on an ongoing basis for adherence to all the standards. The site manager is also co-liable depending on the provisions of the contract.

¹¹ <https://www.wko.at/branchen/gewerbe-handwerk/bau/gewerbeberechtigung-baumeister.html>

¹² <https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20002421>

¹³ <https://www.jusline.at/gesetz/gewo/paragraf/99>

¹⁴ <https://www.beruflexikon.at/berufe/2589-WirtschaftsingenieurIn-Bauwesen/>

Building process – building license/permit^{#15}

Types

- Minor construction projects or construction projects that do not require notification or permit (ie. Exterior renovation, change of windows, doors, composting plant etc.)
- Notifiable construction projects (ie. alteration of garage, fencing, garden house etc.)
- Building projects requiring a permit (ie. Individual houses, office buildings, industrial facilities etc.)

Construction negotiations

Phase not existing in all federal states.

Depending on the building project, the neighbours will be informed about the project. Construction negotiations (a meeting with owners of adjoining property) may also take place. At the construction negotiations, all persons and authorities involved (ex. neighbours, road manager) will be given the opportunity to assert their rights and interests.

Grant of building permit

In principal a written application for planning permission needs to be filed at the competent authority or a construction notification to be issued in order to obtain permission to carry out the building project.

After all requirements are met, written building permit is granted.

Furthermore, the building must be completed within a certain period of time. If timelines are not followed, the building permit expires. Depending on the federal state the deadlines can be extended upon request. The documents required are usually the following:

- Construction plans
- Written building specifications
- Evidence of land ownership
- Static calculations
- Energy certificate etc.

Competent authority

Municipality - The authority checks the completeness of the application and whether mandatory regulations conflict with the construction project.

¹⁵ https://www.oesterreich.gv.at/themen/bauen_wohnen_und_umwelt/bauen/Seite.2260300.html#Voraussetzungen

Liability and insurance requirements¹⁶

“Gewährleistung – Schadenersatzansprüche“¹⁷ (Guarantee – Damage Claims)

The law provides for various provisions that support and protect the purchaser/builder. One of the most important ones is the statutory guarantee.¹⁸ “Guarantee” means that the producer of a work or the seller of an item is liable for the work performed or the object of purchase being free of defects when it is handed over, independently of fault. A property is free of defects if it shows the explicitly assured or usually assumed properties, and can be used as agreed.

It is also important to be aware of the difference between the statutory guarantee and any warranty assumed. Based on the statutory guarantee, essentially the respective contractual partner is always liable in line with the statutory provisions. The scope of the guarantee is legally precisely regulated. The scope of any warranty assumed is subject to the respective contract and may contain the most diverse exclusions. A contractually assured warranty may, in any event, not limit the statutory guarantee and is therefore valid together with it (the latter).

In the case of immovable property, the guarantee period is three years. However liability is only accepted for defects which already existed upon the property being handed over. Should a defect come to light within six months of the property being handed over, the statutory presumption that the defect already existed when the property was handed over applies. Pursuant to Sec. 924 Austrian Civil Code (ABGB), it is the case that, in regard to any defects that emerge within six months of the property being handed over, it is presumed that they were already there at the time of delivery.

Insurance

In case contractors are subject to Section 94/5 of the Trade Act (ie, if they are constructors as defined in the Trade Act), they must take out liability insurance for personal, material and financial damages. The minimum cover is €1 million or €5 million depending on the contractor’s annual turnover. Employers may request a higher cover with or without excess depending on the size, type and potential risk of the construction project.

Market mechanisms as measures to support compliance and risk-management in construction

Austrian standards (ÖNORMEN, generally accepted codes of practice)

The most important standard is Standard B 2110 on the contractual rights and obligations for construction contracts.¹⁹ (ex. when concluding contracts, detailed provisions which unmistakably lay down what services have to be provided, how, by when, at what price and on what terms and conditions)

Parties are mostly free to decide how to set up their relationship. Due to the fact that in construction projects various questions arise, the Austrian Standards Institute issued voluntary Standard B 2110 for general

¹⁶ <https://www.law-experts.at/en/news-jurisdiction-law-attorney-jurisprudence/publications-and-law-information/475-purchasing-property-statutory-warranty>

¹⁷ <https://www.law-experts.at/baumaengel-einklagen-gewaehrleistung-schadenersatz>

¹⁸ <https://www.law-experts.at/en/news-jurisdiction-law-attorney-jurisprudence/publications-and-law-information/444-practical-tips-house-builders-purchasers-apartments>

¹⁹ <https://www.planradar.com/at/gewaehrleistung-bauleistung-vob/>

contractor agreements and voluntary Standard B 2118 for general contractor agreements for large-scale projects in the public sector, containing essential clauses for the contracts. Both standards are considered general terms of contract and must be included in contracts by mutual agreement of the parties. While the institute recommends including or excluding Standards B 2110 or B 2118 in full, it is possible to only agree on certain parts. Under the Federal Procurement Act, the use of Standard B 2110 is mandatory for construction projects and parties wishing to deviate need to justify such alterations.

Risk-management

According to general contract law, the ground risk (ie, the risk that the ground contains contamination, archaeological remains or is unfit for construction) is vested with the owner, but may be transferred to the contractor by agreement. In any event, contractors must examine and warn employers if the ground is unsuitable, provided that the contractor either knew or should have known. The risk of fulfillment of the contract (ie, the completion of the building) is vested with the contractor until handover. Voluntary Standard B 2110 limits the producer's liability in the case of force majeure. In concrete terms, the purchaser bears the risk for force majeure even before takeover of the work if the producer took all protective measures to avoid damage.

Risk-assessment

Additional approvals may be required, in particular for monument protection, environmental protection (including environmental impact assessments) and the protection of natural resources and water. Companies are advised to implement a risk assessment scheme, including anti-corruption measures in order to mitigate and ideally eliminate criminal behaviour.

Case study II: France

The French building regime shows that a robust liability system, with the help of mandatory insurance, is an alternative to state involvement in control and enforcement of building standards. The building system uses different instruments than those used by most of the other OECD/EU regimes:

- The state is merely the “**enabler**” of the system. Consequently, it rarely intervenes directly.
- **The principle of liability is the foundation of the system:** according to this provision, in force since the Civil Code of 1804, builders are liable towards the owner for any potential damage.
- **Mandatory insurance preserves the building’s user safety and its economic interests:** a legislative reform in 1978 under the name of *Spinetta Law* requires that all actors involved in the building process have an insurance to cover all potential damages → all companies are required to provide a 10 year warranty against damages following completion of works

Why was it introduced?

- solve deficiencies of the previous system
- without mandatory fill insurance, the owner did not get compensation for damage suffered - OR did, but only after a long and difficult wait (congestions in courts but also the costs of the damages owners had suffered were unpredictable)
- to notice: building norms and standards are mostly required within the framework of the ten-year-liability and insurance coverage, these standards are de facto mandatory → if the builder does not follow them, and damage occurs, he/she is liable and the insurance may refuse to cover the costs of damages

The core elements of the French building system:

The state rarely intervenes directly (main different with other building regimes)

- most issues related to building processes are resolved at the insurance level → avoiding costly and lengthy court proceedings
- control is not carried out by state inspections (independent professionals)→ technical controllers are subject to mandatory insurance
- the state decides which buildings require a specific permit, an obligatory safety visit, building permit or an independent technical control (the risk level of the building determines which of these requirements are needed)

The system is market based

- specific liability for all constructors of work
- three level of guarantees
 - a one year guarantee of perfect achievement of work
 - a two year guarantee of satisfactory functioning of dissociable parts of equipment
 - a ten year guarantee for ten year liability → liability of the builders towards the owner for any damage revealed within ten years and rendering all or parts of the building defective or unsafe. 10 year liability lasts for ten years following the handover

- except the owner, all actors involved in the building process are subject to such liability (so is the seller of the building after completion)
- sharing liability between different actors (joint liability for builders and manufacturers)
- insurance obligation for all actors involved in the works
 - both owner and builder have to take out insurance (there are exceptions)
 - Mandatory insurance contracts must cover building standards. Since compliance with DTUs is in most cases required within the framework of the ten-year liability and insurance coverage, these standards are *de facto* mandatory
 - A shift of power and workload toward insurance companies
- private inspections regime
 - Except for specific cases (see I.3.A. below), technical controllers intervene on request of the owner. However, control of technical requirements is often needed for insurance purposes. Indeed, insurance companies usually require from the owner the appointment of a technical controller. His/her presence and the scope of his/her missions determine – among other things – the cost of the premium applied
 - controls by public bodies are rare and are carried out only in certain situations, as stipulated by regulation. The system has however been modified, in particular by emphasizing controls for higher-risk facilities
 - see benefits on the document

The French system includes risk-based considerations

- Among all European building regimes, the French system is one of those that theoretically takes best into account the risk management process:
 - the owner acts as a ‘sponsor’ for risk management (they act as the building project manager, and ensures the support and monitoring of the construction work throughout the delivery of the construction work; they have a complex and responsible function;
 - a third party (the technical controller) assesses the risks and the way these risks can be reduced;
 - finally, the insurer takes care of any residual risk

Strength and weaknesses of the French system

Strengths

The system introduced by the *Spinetta Law*:

- simplifies the building process and reduces costs for the state;
- protects the user of the building;
- ensures compliance to quality and safety requirements → Statistics indicate that the results in terms of safety are equivalent to that of comparable countries

Weaknesses of the system

- As soon as an innovative technique/product that was not agreed in the insurance policy is involved in the work, the builders have to require a modification of the insurance conditions;

- The joint liability system may raise some concerns in terms of the share of responsibilities between the different participants in a building process

Case study III: United Kingdom

The following section focuses on steps taken by Britain's Health and Safety Executive (HSE) to reduce reliance on traditional legal approaches to regulatory delivery and to improve engagement with businesses through behavioural and supply-chain targeted approaches. The incorporation of the latter can make regulatory delivery of inspections and enforcement more efficient and robust. They could also help in reallocation of precious human resources from inspections to upstream engagement.

HSE's Approach

As a regulator HSE had the knowledge and authority to bring diverse parties and stakeholders together to create concrete action plans. Further, insights from inspection data also helped strengthen the knowledge base for creation of solid changes. A central element to achieve regulatory objectives was the reliance on Influence Network (IN) Model. IN focuses on immediate and direct causes of risk applicable in a wider context of how current activities are structured and ongoing. The new approach envisages the following:

1. Supporting Risk Creators: One of the main functions of the British approach to regulatory delivery is to support "risk creators", namely businesses and establishments to manage the risks they produce.
2. Engagement through partnership: By working in partnership with all stakeholders, HSE has been able to produce long-lasting change at high risk points in the supply chain. Supply chain is a particularly relevant consideration in the construction industry because of its fragmented nature.
3. Law is the last resort: Sanctions and prosecutions are often only the last resort and emphasis is made on businesses taking responsibility and managing risks better.
4. Proactive not reactive: Industries are required to be more strategic and proactive, especially in upstream aspects such as procurement, planning, design etc.
5. Staff training: Staff is trained and informed by best industry practices to steer economic actors towards safer practices.

Regulatory Objectives

HSE, through the design of its objectives, concentrates first on large companies and their supply chains and thereafter on smaller players. Since risk creators are more proactive, HSE is also able to free up more resources.

1. Reduction of harms and risks is the main objective through identification of risk producing stakeholders and affixing greater share of responsibility and accountability on them; compliance not the top priority.
2. Bringing about cultural change in risk management through engagement with key intermediaries, stakeholders and other regulators
3. Improving and clarifying the regulatory framework
4. Developing clear communication strategies, guidance and standards for construction industry and SMEs

HSE's Model and reliance on Influence Network

The model adopted by HSE offers more flexibility and sustainability by targeting early parts of

the supply chain rather than onsite inspections.

- Four influence levels through 39 human, hardware and external factors incorporated (IN for construction health and safety).
 - **Environmental:** political regulatory, market, social influences affecting strategic decision making.
 - **Policy:** internal culture, contracting strategies, company management
 - **Organizational:** training, planning, procedures, supervision which influence directly the culture and working of a company
 - **Direct:** competence, risk perception, equipment operability and maintenance and operating conditions, which directly influence the probability of adverse outcomes.

- Early use of IN means:
 - early engagement with clients, designers and contractors engaged in large projects. More cooperation with trade bodies and similar supply groups to attain uniformity in understanding of safety requirements.
 - Supply chain interventions (defining issues, solutions with industries, clarifying enforcement expectations and ensuring consistent application by inspectors.
 - Sustained contact with key players having wide influence
 - Using findings from site observations to address shortcomings straight at the source.
 - More initiatives with SMEs such as accessible guidance, greater awareness initiatives, intensive inspection activity.