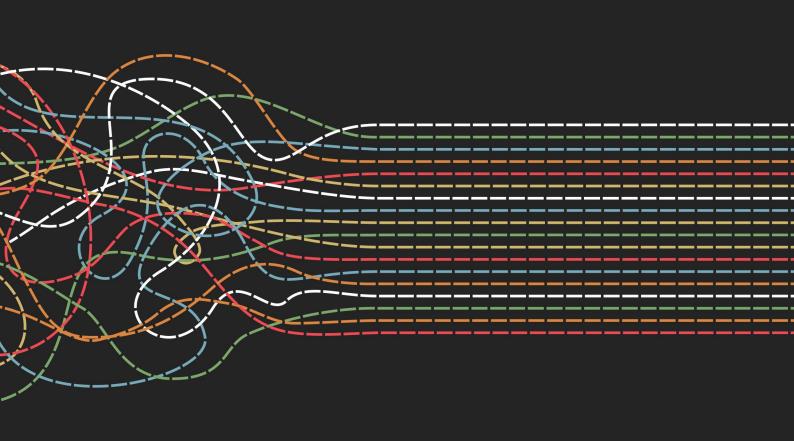
A Modem
Building & Construction
Regulation Framework
for Malta



June 2020



The Kamra tal-Periti (Chamber of Architects and Civil Engineers) is established under the Periti Act (Chapter 390 of the Laws of Malta). Its mission is to support members of the profession in achieving excellence in their practice of architecture and engineering in the interest of the community.

The administration of the Kamra is entrusted to its Council which consists of periti elected from amongst its members. The Council is supported by a Secretariat and several Working Groups and Committees.

The Kamra tal-Periti is an active member of the Architects' Council of Europe (ACE), the Union of Mediterranean Architects (UMAR) and the European Council of Civil Engineers (ECCE). It is affiliated with the International Union of Architects (UIA), the European Forum for Architectural Policies (EFAP) and the Commonwealth Association of Architects (CAA). It is a founding member of the Malta Federation of Professional Associations, and has recently established a collaborative relationship with the Malta Chamber of Commerce, Enterprise and Industry.

The Kamra has representatives on several bodies in Malta including the Bord tal-Warrant tal-Periti, the Building Industry Consultative Committee (BICC), the General Services Board (GSB), the Users' Committee of the Planning Authority and the Climate Action Board Sub-Committee for the Building Sector.

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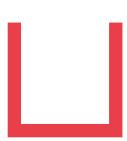
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In its seminal publication The Urban Challenge - Our Quality of Life and the Built Environment, the Kamra tal-Periti (2007, p. 50) had highlighted quality of construction as a key aspect that was crying out for immediate attention. It had stated that "Quality of construction needs to be improved. New regulations are necessary and welcome but should be backed by adequate research and funding to ensure they truly provide value for money to society. The establishment of a 'Construction Platform' would provide a clearer reference point for developers, design professionals and the general public. Continual training and professional development, the certification of tradesmen and the licensing and classification of service providers will help ensure that construction practice improves. An adequate level of protection and cover for all stakeholders will ensure clients' interests are better protected. Likewise, improved site management and project administration, and a greater awareness of Health and Safety issues will help to ensure that safety risks and inconveniences to neighbours are reduced"

Thirteen years down the line, the Kamra's calls for an overhaul of the industry have not yet been heeded. It took the collapse of three buildings in May and June of 2019 for Government to acknowledge that the industry was in crisis, and that the current situation was no longer tenable. New regulations in the form of Legal Notice 136 of 2019 were hastily drafted and brought into force, despite protestations by the Kamra tal-Periti on their inadequacy to address the ailments that beset the industry.

Just over a month before, in May 2019, the Kamra tal-Periti had published its proposals for an overhaul of the regulatory framework that governs the industry, and initiated an intensive public consultation process with various stakeholders including the Chamber of Engineers, the Chamber of Commerce, the Building Industry Consultative Council, the Building Regulation Board, the Building Regulation Office, the Building and Construction Agency, the Planning Authority, the Malta Developers Association, and the Malta Insurers Association. All these entities and organisations endorsed the Kamra's proposals. There is therefore industry-wide consensus that such proposals are both necessary and desirable.

The proposals were also presented to the European Commission and the Opposition, as well as to Government which, through a Letter of Commitment issued in August 2019, finally recognised the need for a comprehensive reform of the building and construction industry, and committed itself to implement the Kamra's proposals.

Weeks and months continued to roll by, and another collapse occurred in March 2020, this time claiming the life of an innocent third party. The Kamra reminded Government that the crisis which befell the industry in 2019 was far from over. Various sectors of the economy, such as blockchain, artificial intelligence and gaming, have received Government's deserved attention over recent years, yet the construction industry, which is one of the main contributors to the country's GDP, remains the most unregulated one, claiming the lives of innocent persons on an all too regular basis. The Kamra again called upon Government to demonstrate firm resolve to urgently but diligently bring about the necessary reforms.

Amid the chaos caused by the coronavirus pandemic, the Prime Minister established an Expert Committee to advise on the way forward to ensure that the problems in the building and construction industry are properly addressed. The Kamra presented its proposals to this Committee in March 2020, and looks forward to the outcome of its review.

This current document represents the finalisation of the public consultation process undertaken by the Kamra tal-Periti, and presents its conclusive position for a reform of the building and construction industry. The position essentially encompasses the following principles:

- The consolidation of the various fragmented pieces of legislation, bodies and departments regulating the industry under one legislative and administrative umbrella, in order to ensure higher standards in the industry, bring it in line with modern practices and standards, and ensure the protection and sustainability of the significant investment made when properties are constructed, bought or rented out.
- 2. The separation of planning and development permitting processes from those related to building standards and regulations, not just at inception stage, but right through to end-of-life considerations in the Kamra's opinion, the planning process has reduced itself from one related to the achievement of overarching planning goals and policies, to one of development permitting, with a vast number of regulations pertaining strictly to the construction phase of a project becoming intertwined within the planning process itself, burdening the planning permitting process unnecessarily by requiring technical detail which is premature at this stage of a project, and detracting from the focus of what planning should be about.

3. The introduction of a comprehensive and contemporary suite of performance-based building and construction regulations, as well as the establishment of a central Authority which, if backed by all the necessary human, financial and technological resources, has the potential to make a significant contribution towards a better quality of our built environment.

The success or otherwise of this reform depends largely on the elimination of a major lacuna in the industry: the complete lack of adequately trained and qualified personnel. Of all the professionals and tradespersons involved in a construction project, only four of the key figures, to one extent or another, are formally qualified. Foremost is the perit, a warrant holder authorised to provide architectural and/or civil engineering services, who very often ends up getting the blame for anything that goes wrong on site and whose responsibilities are incorrectly assumed to cover everything from site cleanliness to structural integrity. The other is the mason, who is not only inadequately trained to deal with the complexity of contemporary building techniques and materials, but who is completely unregulated after obtaining a licence. Then there are the Mechanical and Electrical Engineers, who are often not involved in small to medium scale projects, and are very often engaged after the main structural works have been finalised, thus often resulting in conflicts which may also impact the structural aspects of the design as well as the overall performance of the finished building. The fourth figure is the Project Supervisor required to be appointed under the Occupational Health and Safety regulations, although the law also permits the developer to take on such role, as long as he or she deems themselves to be "competent" in this regard (whatever that means).

No other participants in the industry, other than electricians, are regulated in the slightest manner. Article 1638 of the Civil Code places the responsibility for structural stability jointly on the *perit* and the contractor, however whereas *periti* carry a professional warrant and are subject to a Code of Professional Conduct, building contractors are not regulated at all. This is especially worrying when it comes to demolition and excavation contractors. The absence of a registration system means that anyone with demolition or excavation plant can carry out such works, without any basic training, technical knowledge, or insurance cover. There is therefore an urgent need for registration, licencing and classification of contractors, which should be based on competences and qualifications as well as considerations relating to their workforce, their equipment and capacity.

The introduction of a new figure on construction sites, namely the Site Technical Officer (STO), by virtue of Legal Notice 136 of 2019, has further complicated matters. The Kamra tal-Periti has consistently contended that this role makes construction sites more dangerous as it confuses lines of responsibility and transfers a significant portion of the contractor's liability onto the STO. There is also the risk that this role may be perceived as one which takes over the responsibility for site inspections from the project perit. Of even greater risk is that this confusion may increasingly give rise to a laissez-faire attitude by all parties on site as they hide behind the regulatory confusion. Furthermore, the STO's conflict of interest arising from the dependence on remuneration from the contractor, while concurrently having the role of reporting the same contractor to the authorities in case of any breach, while carrying personal responsibility for failing to do so, makes this a Kafkaesque role par excellence. Even more bizarre is Government's insistence that the architect and civil engineer responsible for the design of the project may take on the role of the STO, thus effectively serving two masters, the developer and the contractor: a clear conflict of interest if ever there was one.

Overall, the current situation is unacceptable, and the industry cannot move forward until such glaring deficiencies are properly addressed. The **Kamra tal-Periti** has taken a pro-active role in ensuring that this important industry for the country's economy not only performs well financially, but also, and more importantly, in terms of qualitative criteria. There is a limit to how much people are willing to pay for poorly built properties, and the main stumbling block here is the complete lack of adequate building regulations which set a benchmark for the performance of a building and its components.

The general principles underlying the proposals were approved by the profession, which endorsed this approach at an Extraordinary General Meeting in November 2018. This endorsement was further consolidated by the two largest Extraordinary General Meetings of the Kamra tal-Periti held in June and July 2019, which attracted around 400 *periti* each, and were the detailed proposals were presented for discussion and approval. This support is essential in ensuring the successful implementation of these proposals, and shows that the profession is both conscious of the dire need to bring our industry firmly and squarely into the 21st century, and willing to implement this vision.

A few of the proposals in this document may appear to result in additional

bureaucracy and responsibilities. This is, in my humble opinion, unfounded. The responsibilities we carry as a profession are there, with or without the supporting regulations. The regulations we have today are obsolete and are based on the limited typologies and materials available at the time of their coming into force. Today, the industry is completely different, yet our regulations have not been updated to reflect today's realities, resulting not only in buildings which are not of an acceptable quality, but also rendering the construction process itself rife with risks to the health and safety of all those involved, including innocent bystanders. These proposals seek to provide support to the profession and to the industry as a whole by formalising standards which, in general, reflect best practice approaches already generally followed by the profession despite them not being prescribed.

This document is intended to provide the legislator with a comprehensive basis for taking this important step forward. It includes a thorough review of the current situation, analyses the problems, and provides solutions which are also informed by research on systems which have been tried and tested in other countries.

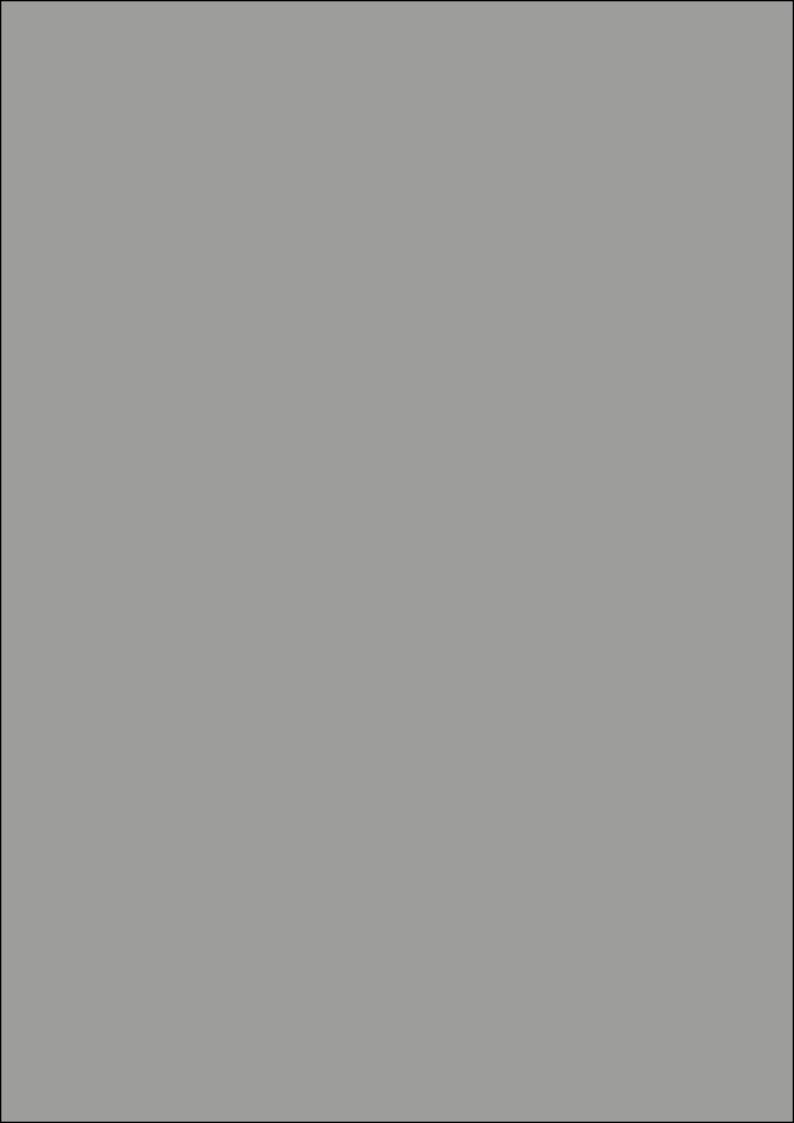
All that is left, therefore, is the will to take this vision through. It will not be an easy task, but I am sure that, collectively, we have the necessary expertise to ensure a smooth and professional transition which will, ultimately, not only benefit the industry as a whole and the direct players within the industry, but, more importantly, the whole of society.

The **Kamra tal-Periti**, as a key stakeholder in the whole process, is committed to provide its full assistance and support to ensure the implementation of this vision.

Perit Simone Vella Lenicker President, Kamra tal-Periti

01 June 2020

building regulation working group



André Pizzuto graduated in engineering and architecture at the University of Malta in 2002, and was granted a professional warrant to practise as an architect and civil engineer in Malta in 2004. He successfully read for a master's degree in Planning Policy & Practice at London South Bank University, an MBA in Real Estate and Construction Management at the University College of Estate Management, Reading, and a Postgraduate Diploma in Project Management at the Royal Institute of Chartered Surveyors.

Pizzuto is the Managing Director of Design Principle, an architecture firm he set up in 2004. He was also Executive Head of the Property Services Department at the Housing Authority of Malta between 2011 and 2013. He was elected Vice-President of the Kamra tal-Periti in January 2019, after having served as Council Member since December 2014. He is also a Council delegate on Building Regulation in Malta since 2017 and represents the Chamber on the Building Industry Consultative Council (BICC) on matters related to building regulation. In 2017, he was also appointed Chairperson of the Chamber's Building Regulation Working Group tasked with the formulation and development of a position paper on a comprehensive building regulation regime for Malta which was published in May 2019.

KARL MICALLEF

Karl Micallef graduated with a Bachelor of Engineering and Architecture from the University of Malta in 2006, after which he worked with DeMicoli+Associates on various projects in Malta and Libya. He read an MSc degree in earthquake engineering at Imperial College London and then successfully pursued a PhD, also at Imperial College London. His research investigated the response of plated structures to blast loading and how high-performance steels and novel polymeric composite materials can be used to mitigate damage.

After working at Foster+Partners for 2 years, Micallef joined the Structural Engineering group at the London office of Skidmore, Owings and Merrill in 2015, where he is currently an Associate and leading projects such as the new building forming part of the United Nations Offices at Geneva campus, the 245m Karlatornet in Gothenburg and Nine Elms Square development in London. Micallef remains active in academia by delivering taught and design modules at the University of East London.

Alvaro Ferreira, of Portuguese nationality, is a Fire Engineer now based in Malta. He graduated in Civil Engineering, after which he pursued a master's degree specialising in Urban Fire Safety at the University of Coimbra, Portugal. His main academic focus was performance-based fire engineering as opposed to prescriptive regulations found in most countries.

He has working experience as a Fire Safety Engineer in Portugal, France and Malta. His interest in fire safety started at a young age when he joined the Firefighting Association of Pombal as a volunteer firefighter for around 13 years. Throughout his career, he has worked with several architectural companies and construction firms with roles varying from draughtsman to projects engineer and was involved in several residential and commercial projects of both small and large-scale nature.

Ferreira is a professional member of the Order of Engineers in Portugal and a member of the Institution of Fire Engineers, UK, and the Society of Fire Protection Engineers, US.

JUSTIN ZARB

Justin Zarb received a bachelor's degree in engineering and architecture from the University of Malta (2013) and a master's in Integrated Building Systems from ETH Zurich (2018). The first Passivhaus conference in Malta in 2011 kindled his interest in sustainable architecture. After a two-year stint working on new buildings at UoM, publishing maltarail. org and being involved with Kamra tal-Periti and the iiSBE Malta chapter, he moved to Zurich on a scholarship to focus on the broad problem of energy use and quality in the built environment. He has researched adaptive comfort and passive building performance in a Maltese context as well as the accuracy of norm-based models used to assess residentialenergy performance and recommend interventions and now specialises in energy efficiency and building performance at Buro Happold, Berlin.

Philip Grech graduated with honours in architecture and civil engineering from the University of Malta and read for a master's degree in Water Resources Technology at the University of Birmingham, UK, holding a scholarship from the British Foreign and Commonwealth Office. He is also a member of the UK Chartered Institute for Water and Environmental Management.

He was Chief Engineer and later Director of the Drainage Department, from 1989 up to 1996. A major activity during this period was the draughting and publishing of the Sewerage Master Plan in 1992. He also worked at the Water Works Department from 1987-1989 on the establishment of their Planning and Development function, setting up the first computerised Distribution Network models.

Grech practiced in the U.K. with Rofe, Kennard and Lapworth, and from 1996-97 was consultant to the WSC in its preliminary studies for the preparation of the Stormwater Master Plan.

From 1996 to date he has provided services to both the public and private sectors. Besides establishing an architectural practice, he has carried out many hydrological studies and utility impact studies for Environmental Impact Assessments, design and supervision of both sewage and water irrigation systems besides situation troubleshooting.

CLIFF GOODENOUGH

Cliff Goodenough is a qualified firefighter and instructor since 1982, having a deep and up-to-date understanding of fire prevention design. He progressed from Lancashire county fire service to the Royal Air Force Crash Fire Rescue Service performing his duties in frontline military bases both in the UK and overseas. On exiting the Military, he became an Emergency Response Fire Fighting Instructor to the oil & gas industry for Petrofac Training working both on- and offshore. Being audited by the oil industry gave him a vast knowledge of working to very highstandards of fire safety. In 2007, he opened a consultancy firm in Malta carrying out a variety of Fire Safety and Emergency Response Services such as Fire Risk Assessments, Emergency Response Procedures and all types of fire training to some of the largest companies in the country.

Amber Wismayer graduated from the Faculty for the Built Environment, University of Malta, in 2010, with a bachelor's degree in engineering and architecture, and was granted a warrant to practise the profession of a perit in 2012. She obtained a Master of Science degree from London in environmental studies and energy efficiency in 2013. She subsequently read for a PhD at the University of Bath which focused on the impact of occupant behaviour on passive environmental design strategies in heritage buildings. Her areas of interest include policy, heritage architecture and environmental performance, and she participates actively, both locally and internationally, at various levels in this field.

Wismayer has held the post of Honorary Secretary of the Kamra tal-Periti since 2013. She represents the Kamra in the Architects' Council of Europe's Environment and Sustainable Architecture Working Group. She also represents the Chamber on the Building Industry Consultative Council (BICC) as the coordinator of the Regeneration of Property Working Group, and on the Climate Action Board Subcommittee for the Building Sector.

She established her own practice in 2012. Over the last four years, she has led the Sustainable Regeneration of Built Heritage Initiative, under the auspices of the President of Malta.

PAOLO CUCCHI

Professor Paolo Cucchi holds a master's degree in architecture from IUAV - Venice. He is registered to practice in Italy, UK and Malta. He is also a member of the International Academy of Architecture since 2007.

In 1987 Paolo Cucchi founded PCA-PaoloCucchiArchitects, an international architectural practice, based in Italy and Malaysia. The firm operates at different levels, from attentively crafted interiors to large scale projects, embracing residential, hospitality, landscaping and urban planning. Between 2003 until 2010 he lectured at UTM (Universiti Teknology Malaysia) and NUS (National University of Singapore) on high rise and housing. He is also a visiting professor at UNIBO (University of Bologna Faculty of Architecture "Aldo Rossi") and Tsinghua University, Beijing.

Milan Haluska, of Czech nationality residing in Malta, graduated from the Faculty of Mechanical Engineering of the Czech Technical University in Prague. He worked for 12 years in the USA in construction management, particularly in HVAC and energy conservation in public sector projects.

On his return to the Czech Republic, he set up a chemical production company for surfactants and polymeric products. He developed several construction chemicals, including crystalline waterproofing and other types of admixtures. He is experienced in the processes governing CE Marking of construction products in accordance with the Construction Products Directive.

Milan Haluska is retired but engaged in the construction field on a consulting basis.

MARCO LA ROSA

Marco La Rosa is a warranted architect and civil engineer specialised in the transport sector. A Construction MBA graduate, he has worked in design and construction management in Italy, Spain and Malta. He is a resident engineer of the Marsa-Paola Junction project.

La Rosa is also specialised in contract management and BIM modelling.

The Building Regulation Working Group reported regularly to the Council of the Kamra tal-Periti. Perit Simone Vella Lenicker, current President of the Kamra, and Professor Alex Torpiano, Past President, were the main contact points between the Council and the Working Group, providing feedback and direction as required. In recent months, a Council Sub-Committee was established, composed of Perit Simone Vella Lenicker (President), Perit André Pizzuto (Vice President), Perit Amber Wismayer (Honorary Secretary), Professor Alex Torpiano (Past President) and Perit Gaston Camilleri (Council Member) to take forward the conclusion of this document.

SIMONE VELLA LENICKER

Simone Vella Lenicker received a bachelor's degree in engineering and architecture from the University of Malta in 1999, and was granted a professional warrant to practice in 2001. She is currently Design Director at AP Valletta, a design firm established in 1991, and is primarily responsible for various aspects of the firm's services including practice management, Planning Authority procedures and compliance, property valuations and feasibility studies, and master planning.

Vella Lenicker was elected President of the Kamra tal-Periti (Chamber of Architects & Civil Engineers) in January 2019, after occupying various posts within the Council since 2004, including those of Honorary Secretary and Vice President. She served as Editor of the Chamber's quarterly journal "the Architect" between 2006 and 2018, and represents the Chamber on various Boards and Committees, including the Users' Committee of the Planning Authority, the Building Industry Consultative Council Advisory Board and its Property Market Committee, as well as the Climate Action Board Subcommittee for the Building Sector.

She has been a member of the Building Regulation Board since 2011, initially nominated by Government and more recently nominated by the Kamra tal-Periti, and is also a registered Energy Performance of Buildings Assessor.

ALEX TORPIANO

Professor Alex Torpiano graduated in engineering and architecture at the University of Malta in 1977 and was granted a professional warrant to practise as an architect and civil engineer in Malta in 1979. He read for

a Master of Science degree in Concrete Structures at Imperial College, University of London in 1979, and a PhD in 1987, with a thesis entitled On the Design of Masonry Shell Structures. He has had a long career as lecturer at the University of Malta, starting from Assistant Lecturer in 1979 to Professor in 2017. He has acted as Head of the Department of Civil and Structural Engineering, (previously Building and Civil Engineering) for about twenty years, and of the Department of Architecture and Urban Design since 2016. He was appointed Dean of the Faculty for the Built Environment (previously Architecture and Civil Engineering) in 2008. At the University, he has served as a member of the Council of the University, of Senate, and of a number of Institutes including the Institute of Construction and Masonry Research, which he set up in 1994, the Institute of Sustainable Energy, the Institute of Climate Change and Sustainable Development, and the International Institute of Baroque Studies. He is a founding partner of TBA periti (1988-), and aoM partnership (2000-2013).

He has served the Council of the Kamra tal-Periti from 1990, acting as President between 1994 and 1996, Vice-President in 2016, and as President between 2017 and 2018. He currently serves as Immediate Past President. He has served on the Planning Appeals Board (1993-1997), and on the Periti Warranting Board between 1999 and 2001, and since 2009. He has also served as a member on a number of Boards related to the construction industry, including Malta Standardization Authority, BICC, the Construction Products Expert Group, the Eurocodes National Implementation Committee, the Civil Protection Scientific Committee, and the Valletta Rehabilitation Committee. In April of 2019 he was appointed as Executive President of Din I-Art Helwa.

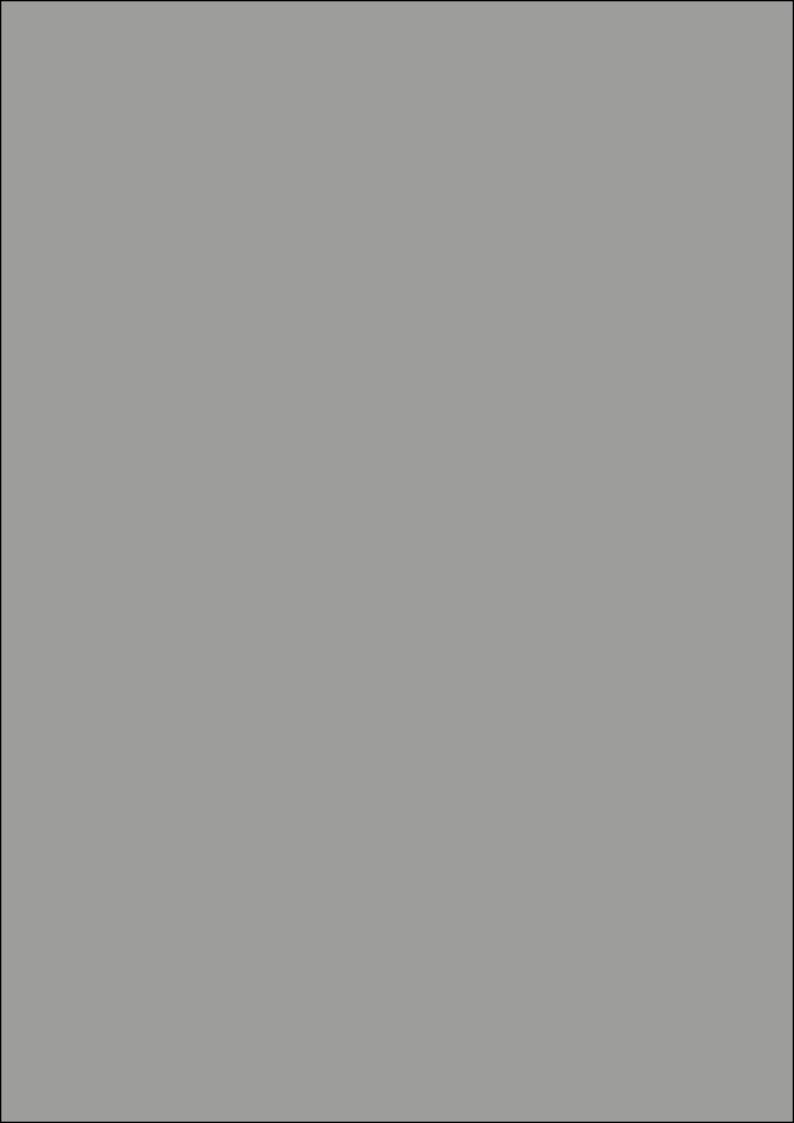
GASTON CAMILLERI

Gaston Camilleri graduated in engineering and architecture at the University of Malta in 2006, and was granted a professional warrant to practise as an architect and civil engineer in Malta in 2008. He holds a Master degree of Science (Conservation Technology for Masonry Structures), concluded in 2011. His areas of interest include, heritage architecture, structural strengthening interventions and architectural design and detailing. He has been a partner at TBA Periti since 2015, following 9 years of professional work within the firm.

Camilleri was elected as a council member of the Kamra tal-Periti in January 2018. In 2019, he was also appointed as a member of the Council's Building Regulation Working Group tasked with the formulation and development of a comprehensive building regulation regime for Malta.

The publication of this document would not have been possible without the support of the Council of the Kamra tal-Periti and the various *periti* and stakeholders who contributed to the public consultation process. Special thanks are also due to **Archi+**, and specifically to **Theo Cachia** and **William Moran**, for handling the design and typesetting of this document.

executive summary



The Kamra tal-Periti is proposing a complete overhaul of the regulatory processes and standards involved in the building and construction industry. It is proposing a consolidation of all building and construction regulation under a single Act, with building codes and performance standards regulated by a single entity, namely the Building and Construction Authority (BCA), proposed by Government in October 2018. This document outlines the Kamra's vision and proposals.

The context in which this modern framework is being proposed is outlined in the Introduction to this document. It is accepted that the building and construction industry has evolved at a rate which has completely outpaced whatever scant, and fragmented, regulations exist. Building legislation in Malta dates back to the mid-19th century in response to a public health crisis, and has barely developed since, let alone in a systematic, consistent way. The Kamra has consulted widely with stakeholders about its vision for the regulation of industry; there is wide consensus that the current situation is no longer tenable.

The situation regarding current building and construction regulations in Malta is outlined in Chapters 2 and 3. The document emphasises the difference between building regulation, which refers to the building as a product, which needs to achieve specific performance characteristics in order to fulfil the expectations of the consumer, and construction regulation, which refers to the regulation of the process of erection and fabrication of buildings and structures. These two chapters highlight the extensive fragmentation of the regulatory tools available in Malta, and the unnecessary bureaucracy this has created. The Kamra is not simply arguing about the removal of bureaucracy, but is proposing rationalisation and consolidation so as to render bureaucracy more effective.

Chapter 4 gives an important overview of the best regulatory practices in Europe, to form a comparative basis for the proposals of the Kamra. This analysis was crucial to ensure that what is being proposed has been effectively tried and tested, and to assure the industry of the robustness of the Kamra's proposals.

The core of the proposals of the Kamra is presented in Chapter 5. A key thought, underpinning the proposed Framework, is that the responsibility for each phase of the construction process has to be carried by the respective actors. This requires that the actors for each part of the work have to be adequately trained, and subsequently appropriately licensed.

The proposal is based on **ten important principles**:

- 1. The separation of planning permit and building permit processes;
- 2. Clear well-organised regulatory processes designed to promote public safety, and quality, in the interest of the consumer, rather than being focused on ascribing blame post-accident;
- 3. Clear distinction between the regulations governing building (the permanent works) and those governing construction processes and temporary works.
- 4. The BCA is to take on the consolidated role of the assessment of buildings, building authorisations, enforcement, and monitoring of the construction processes, with the 22 public entities hitherto entrusted with the different areas of interest, becoming key stakeholders in the drafting of regulations and guidance documents
- Major projects and public buildings to be subjected to an independent review, particularly in terms of structural design and fire engineering through the introduction of a new professional figure (Engineering Auditor).
- 6. Contractors to be solely responsible for the process of construction, including temporary works, and would therefore have full possession of construction sites for the duration of the works. They would obviously need to have specific skills, and should therefore be classified and licensed according to such skills.
- 7. The enforcement of construction regulations to be delegated to private service providers, licensed by the BCA, referred to as Building and Construction Inspectors (BCIs).
- 8. Contractors to be required to certify that the executed works comply with the design instructions, and with the requirements of the Construction Products Directive.
- 9. The construction phase will be concluded by the issuance by the BCA of a Compliance Certificate, which, inter alia, authorises that the building can be brought into use.
- Post-occupancy checks and audits to be undertaken as predetermined by the BCA to ensure the continued compliance of the structure with building regulations.

The Kamra's proposal is based on a system of certifications and Approved Documents, underpinned by two sets of Codes, the Building Codes and the Construction Codes.

Building Codes would regulate the performance of the finished works, in accordance with the essential requirements for the building to be deemed safe, functional and fit for occupation before being brought into use, and remaining so after being brought into use. It is envisaged that these Building Codes will be primarily performance-based or functional, with prescription avoided as much as possible, to avoid rapid obsolescence and encourage innovation. Guidance documents, providing non-mandatory templates satisfying regulations will provide best practice and widely accepted norms, which would allow fast-track BCA approval. The following components would be covered.

- A. Structure;
- B. Fire Safety & Prevention;
- C. Site Decontamination;
- D. Waterproofing;
- E. Toxic Materials & Substances;
- F. Sound Insulation;
- G. **Ventilation**;
- H. Sanitation, Plumbing & Hot Water;
- I. Water Conservation;
- J. Drainage;
- K. Waste Management & Disposal;
- L. Combustion Appliances & Fuel Storage;

N.	Energy Conservation;	
Ο.	Access;	
P.	Lifts, Escalators & Travellators;	
Q.	Electricity;	
R.	Security;	
S.	Information & Communications Technology;	
T.	Illumination;	
U.	Materials, Products & Workmanship.	
Construction Codes would regulate the construction processes, including all temporary works, required to ensure safety and minimum inconvenience. The following components will be covered.		
A.	Health & Safety in and around Construction Sites;	
B.	Construction site operations;	
C.	Demolition Works;	
D.	Ground Investigation Works;	
E.	Earthworks;	
F.	Construction & Alteration Works;	
G.	Temporary Works;	
H.	Noise Abatement;	
I.	Environmental Protection;	
J.	Waste reduction and disposal;	

Protection from Falling, Collisions and Impact;

M.

L. Machinery, Plant & Equipment;

K. Insurance.

The Kamra is also recommending the consolidation of the pre-, peri- and post-construction administrative processes, including the submission to the BCA of documentation relating, for example, to the appointment of licensed contractors and professionals, the avoidance of third-party damage, EPC design rating, commencement notices, health and safety files, and compliance certification. **The construction process is therefore divided into four main phases:**

- a. Pre-construction phase (design and pre-commencement)
- b. Construction phase (execution)
- c. Completion phase (compliance certification, handover and occupation)
- d. Post-occupancy phase (post-occupancy review and certification)

For the pre-construction phase, the Kamra is proposing streamlined processes, depending on the project typology (for example, regular procedure for major projects, light procedure for medium/small projects, procedure by building notice for minor works, exempt) including:

- 1. The appointment of Principal Submitting Person, PSP, by the developer;
- The submission of building permit application to the BCA, together with construction drawings and specifications in accordance with the Building Codes, including the identification of the various professionals involved in the project at design stage;
- 3. The grant of the building permit;
- 4. The appointment of Building and Construction Inspector (BCI);
- 5. The submission of the commencement notice, including particulars of BCI and the various professionals and contractors involved in the project at implementation stage; and all other requirements as set out in the Construction Codes.

The Kamra is proposing that during the construction phase, works can only be undertaken by trained and duly licensed contractors, employing operators who also have been appropriately trained in their specific trades. The contractor shall take possession of the site, shall be responsible to control access to such site, in order to prevent unauthorised access, and to ensure the safety of all visitors, in particular the PSP or delegates of the PSP, and the BCIs.

For the completion phase, the Kamra is proposing the inclusion of the following steps:

- The submission of the completion certification by the PSP, including as-built drawings and the various certifications drawn up by the professionals and contractors involved in the project;
- The issuing by the BCA of a Compliance Certificate on the basis of certification submitted by the professionals and contractors involved in the project, which would include the following information:
 - a. confirmation that the building is safe for occupation;
 - b. authorisation to the contractor/s to hand over the site to the developer for occupation;
 - c. the requirement for post-occupancy review and certification of the building, indicating type and frequency.

For the post-occupancy reviews, the Kamra is proposing regular inspection, at appropriate frequency, of those components that are critical to public safety, and the continued functionality and compliance with Building Regulations.

The final part of the proposal by the Kamra presents an implementation plan and a tentative timeline for smooth and orderly transition to the proposed system. The Kamra believes that, with a concerted effort from all stakeholders, this timeline can be effectively achieved.

introduction



THE CONTEXT

Document D - Design Guidelines on fire safety for building in Malta, 2004 and Document F - Conservation of Fuel, Energy and Natural Resources (minimum requirements on the energy performance of buildings regulations, 2006, later updated in 2015)

The Kamra tal-Periti has been concerned about the lack of adequate building and construction regulation for over a decade. Indeed, the issue of building regulation in Malta has been at the forefront of the Kamra tal-Periti's agenda for a number of years. In 2004, it was involved in assisting the Building Regulation Office in the development of its first building codes. Unfortunately, this promising start was thwarted abruptly and only two codes were produced¹. Others, including one on structural integrity, were never published.

A number of factors led the Council of the Kamra tal-Periti to set up the Working Group that drew up its position paper on the current state of building and construction regulations: the planning policy on building heights which was modified in 2015 leading to an increase in development potential on existing heights up to three additional floors without due consideration of this policy's effects on structural stability, foundation engineering and seismic resistance; the approval of several high-rise towers since 2017 without adequate building regulations; the cosmetic update of the sanitary regulations of 2016 that was more about addressing illegalities and accommodating more floors within the building height limitation than about achieving higher quality in buildings; and the Grenfell Tower disaster which demonstrated what can happen when building regulations are inadequate or obsolete. The review of the Commuted Parking Payment Scheme (CPPS) in May 2018 deepened the Kamra's concerns further.

The current regulatory framework in Malta is characterised by fragmentation, alarming lacunae, obsolescence, and a complete lack of oversight. Meek and wholly ineffective attempts at regulating buildings and construction processes were attempted over the years by conflating building regulation and control with the planning permission processes over the past three decades. The demerger of the Malta Environment & Planning Authority (MEPA) in 2016, provided an opportunity to rethink building regulation and control, and to align our country's regulatory framework with that of our European partners.

Despite reiterated attempts over the past decades, the Kamra was unsuccessful in convincing government to divorce the planning processes from building regulation altogether (Kamra tal-Periti, 2016a; Kamra tal-Periti, 2017). Government's positionchanged in October 2018, when it launched a White Paper to set up a Building & Construction Authority that is intended to consolidate the role of the BICC, BRO, BRB

and the Masons' Board. The Kamra welcomed this development (Kamra tal-Periti, 2018), and is actively collaborating with Government in the setting up of the Authority.

While the Working Group was instrumental in researching and shaping the overall direction of the proposals, members of the profession were also involved in the process. An Extraordinary General Meeting was held in November 2018 during which the initial proposals were presented. The feedback, which was very constructive and supportive, served to guide the Working Group in developing and refining certain aspects of the proposals contained in this document. The framework formulated by the Working Group was endorsed by the profession at an Extraordinary General Meeting attended by 400 members of the profession in June 2019.

The Council of the Kamra tal-Periti also had a determining factor in the final proposals that are herein being published. Following the endorsement of the draft framework by the profession, the Council embarked on an extensive consultation process with various stakeholders, including the Chamber of Engineers, the Chamber of Commerce, the Building Industry Consultative Council, the Building Regulation Board, the Building Regulation Office, the Building and Construction Agency, the Planning Authority, the Malta Developers' Association, and the Malta Insurers Association. All these entities and organisations endorsed the Kamra's proposals. There is therefore industry-wide consensus that such proposals are both necessary and desirable.

The proposals were also presented to the European Commission and the Opposition, as well as to Government which, through a Letter of Commitment issued in August 2019, recognised the need for a comprehensive reform of the building and construction industry, and committed itself to implement the Kamra's proposals. More recently, the proposals were presented to the Expert Committee established by the Prime Minister, and were well received by such Committee.

This document represents the finalisation of the consultation process undertaken by the Kamra tal-Periti, and takes into account all the comments received to date.

There is wide recognition among members of the profession that the current status quo is no longer tenable. Members of the public look up to



the *perit* as the guarantor of public safety and quality. However, the ever-increasing complexity of our buildings and the innovation in construction techniques have resulted in multi-disciplinarity in both the design and oversight processes, with various *periti* and engineers providing their inputs during the design and execution of the same project. Other unregulated professional figures also began playing an important part in these processes. Meanwhile, contractors remain unregulated, and the Construction Products Directive was only brought into force on paper.

Our profession is completely exposed in this effectively lawless environment, compounded by one of the highest professional liability periods in the world. It is not legitimate to expect *periti* to shoulder the responsibility of the State to regulate buildings and construction processes. The efforts of the Kamra over the years, culminating with this document, were driven by the vision to align our industry to that of other European countries, to ensure that public safety and quality in buildings in Malta rise to acceptable standards, and to ensure that *periti* carry their fair share of responsibilities, but not that of the State or the other industry operators.

It is important to clarify the distinction between building and construction regulation. Building regulation deals with buildings as products that have effects on public safety throughout their lifetime. The purpose of building regulation is primarily that of securing the health, safety, welfare and convenience of people in and around buildings, and people who might be affected by those buildings, while also reducing their environmental impact, through the conservation of energy and water and the minimisation of pollution and contamination (Evans, 2015).

Construction regulation, on the other hand, focuses exclusively on the process of erecting, altering or renovating buildings, including the temporary works that are required to ensure that the final product is fabricated safely and in line with the specified design.

This document is composed of five chapters. This chapter focuses on the context leading to the drafting of this document, and on the fragmentation of the regulatory oversight. Chapter 2 outlines the current situation regarding building regulation. Chapter 3 outlines Malta's current construction regulation regime. Chapter 4 reviews the regulatory frameworks in Europe, zooming in on two different models, the British and Swiss systems. Finally, Chapter 5 proposes a modern and comprehensive regulatory framework which, as already stated, has achieved industry-wide consensus.

This is the third major attempt that the Kamra is spearheading over the past twenty years to bring about this long overdue reform of the industry. We trust that we will at last be successful in bringing Parliament, industry stakeholders and public opinion to recognise the urgency of these reforms, and the validity and thoroughness of our proposals.

OVERVIEW OF EXISTING REGULATORY BODIES

The fragmentation of building and construction regulation in Malta is perhaps not widely appreciated outside the industry. The effects of this fragmentation are:

- Excessive bureaucracy;
- Significant delays in the various phases of a development cycle;
- Scope for conflicting prescriptive regulations;
- Lack of clarity on responsibility and liability;
- Diminished consumer rights.

Below is a comprehensive list of the various public entities that currently have a role in building and construction regulation.

BUILDING AND CONSTRUCTION AGENCY

The **Building and Construction Agency** was established in August 2019, and was tasked with the design, implementation and dissemination of policies together with the consolidation and review of laws and regulations, in the form of a national building code. The Agency is authorised to collaborate with other agencies, corporations, authorities, government and non-government entities and other persons for the carrying out of its functions, as well as with carrying out all the necessary preparations to set up the Building and Construction Authority.

Since its establishment, it has absorbed many of the functions of the Building Regulation Office, and is currently focused on the establishment of the Authority.

BUILDING BEGULATION OFFICE

The **Building Regulation Office** (**BRO**) was set up through the Building Regulation Act in 2011 with the following remit:

a) Administration of building regulations and building control regulations;



- b) Issuance of licenses and registration of masons, building con tractors and tradespersons;
- c) Monitoring of the application of building regulations;
- d) Endorsement of certificates of compliance;
- e) Enforcement of building control regulations;
- f) Provision of technical assistance to the Building Regulation Board (see 1.2.2).

In practice, however, the BRO is unable to fulfil all its remit because of severe restrictions in financial and human resources. Indeed, the annual budget of the BRO in 2018 was €150,000, as much as the PR campaign European Mobility Week and less than the funds allocated for the Tal-Linja Card (€200,000) (MFIN, 2018). Meanwhile, the estimated €1,000,000 generated annually by the BRO through Energy Performance Certificates are not retained but passed on to the Consolidated Fund.

This lack of adequate resources posessignificant health and safety risks to the public, including building occupants and neighbours. As a result of these constraints, the BRO has been compelled into limiting its focus primarily to the adherence of Malta's regulations to the European Directive on energy performance in buildings.

Indeed, the BRO has only been able to partially fulfil remits (a), (e) and (f) in the above list and has only begun working on planning for the implementation of (b) in 2019.

The building regulations currently in force and administered by the BRO are merely those related to energy performance in buildings, and the provision of ICT infrastructure in buildings.

With respect to construction regulation, the BRO's remit is limited to only two aspects of the construction processes:

- Avoidance of damage to third party properties; and
- Minimising nuisance and risk of injury to third parties.

The avoidance of damage to third parties is regulated through L.N. 136 of 2019, which stipulates the requirement of documentation at preconstruction stage to the BRO for works adjacent to, beneath or above third party property, including:

- a) Pre-construction condition reports of immediately contiguous properties;
- b) A works method statement drafted by a *perit* outlining the meth odology of the works;
- c) Insurance cover for any damage caused to third-party property during the works.

The regulations also require the appointment by the contractor of a Site Technical Officer, whose role is to enforce the implementation of the works method statement on the contractor, his employer, and ensure adherence to the regulations as set out in the Legal Notice. The Site Technical Officer may be a *perit*, or anyone graduated in a field of engineering, and according to the Kamra's interpretation of the Legal Notice carries significant responsibilities which, in terms of the Civil Code, should be borne by the contractor. The introduction of this figure on a construction site was strongly opposed by the Kamra - this framework, in fact, proposes the abolition of this role in order to ensure more clarity on the responsibilities of the different actors on a construction site.

The Environmental Management Construction Site Regulations², which came into force in 2007, have the purpose of:

- Limiting environmental degradation through appropriate con struction management practices that cause the least nuisance to neighbours;
- Minimising the risk of injury to the public;
- Protecting the property belonging to the Government and Local Councils;
- As much as possible reducing the hard to the environment.

At the outset, it is necessary to remark that while the enforcement of these regulations is undertaken by the BRO, they are in fact subsidiary to the Development Planning Act. The BRO has however confirmed that the remit was immediately assigned by Ministerial Order to the Building Construction Industry Department, later renamed BRO. Thus, the PA never had any role to play in these regulations since they came into force, which begs the question as to why this legal notice still forms part of the subsidiary legislation of the Development Planning Act.

Nevertheless, despite the PA having rightly never directly been given any role in the enforcement of these regulations, it recently began enforcing

²See I N 295 of 2007



responsibility are more clearly defined.

Construction Site Regulations.

The **Building Regulation Board** (**BRB**) is independent of the BRO. Its functions include:

sub-regulations 9(1) and 9(2), which requires the site manager's details and declaration of acceptance to be submitted with a commencement notice, through its own commencement notice process regulated through Art 72 (4) of the Development Planning Act. Despite the homonymous notices, there is no legal relation between the commencement notice in the Development Planning Act and that in the Environmental Management

A recent development spearheaded by the Kamra tal-Periti was, in fact, the separation of the commencement notice process into two, namely the notification to the Planning Authority of the commencement of the works, and concurrently the notification to the BRO of the commencement of works together with a list of the various persons that will be carrying responsibilities as established by law during the construction process. This has provided much more clarity, and ensures that lines of

- a) Advising the responsible Minister on building regulation;
- b) Consulting with stakeholders on building regulation;
- c) Setting the parameters by which the BRO shall evaluate eligibili ty of consultants, contractors and tradespeople for licensing;
- d) Advise the Minister on the cancellation or withdrawal of such li censes;
- e) Issue technical guidance;
- Decide upon waivers on the application of building regulation on a case-by-case basis;
- g) Act as an appeal body on decisions taken by the BRO.

The BRB, which meets sporadically, is clearly ill-equipped to fulfil the above functions. Its allocated budgets for 2018 and 2019 were a meagre €76,000 (MFIN, 2018). Not only does the BRB not have any adequate support staff to process and administer its functions on a daily basis, but until recently it did not even have an office where to operate from, such is the failure of successive governments to provide it with adequate resources.

Ever since the **Planning Authority** (**PA**) was set up in the early 1990s, it gradually filled a vacuum left behind by the dismantlement of the Building Notice system, which most closely resembled the building regulation process found in European member states and other industrialised countries.

The PA attempts to regulate buildings by tying in conditions to planning permits obliging developers to adhere to basic and primitive building regulations, by requiring post-completion compliance certification, or, in rare instances, revoking permits – making the situation even messier from legal and practical standpoints. Over time, the planning process, which is now well-established and relatively efficient, was exploited by a plethora of other authorities and departments to regulate specific aspects of buildings falling within their respective remits, including ventilation, accessibility, fire rescue, ventilation, and in the case of major projects, waste management.

Indeed, in 2016 there appears to have been an initial attempt at formally conflating planning and building regulation. Art 7 (2) (d) of the Development Planning Act, 2016, states that one of the functions of the PA following the demerger would be "to perform and succeed in the functions which were previously assigned to the Building Regulation Board and the Building Regulation Office under the provisions of the Building Regulation Act and which are now contained in this Act and to perform and succeed in the assets, rights, liabilities and obligations of the Building Regulation Board and the Building Regulation Office established under the provisions of the Building Regulation Act to the extent that the Minister may prescribe by regulations under this Act".

Thankfully, this part of the law has not come into effect, not least because of strong protestations by the Kamra tal-Periti about how detrimental it would be, but also because of the eventual realisation of practically every actor in the industry of the adverse consequences of this step. The Kamra's position has always been that the PA's primary focus should be planning. Over time, however, it became solely focused on development control. Indeed, all its policy documents are geared to serve as development control references. The Strategic Plan for Environment and Development (SPED) and Local Plans are completely devoid of planning vision and detail, and are instead characterised by seemingly arbitrary development parameters without any consideration for translating any



vision into an urban design or planning masterplan. The absorption of building control into its development control processes not only results in a disproportionate concentration of power, but also in the anathema of planning altogether.

Worse still, the PA's approach of incrementally increasing building height limitations has a direct impact on structural integrity, seismic resistance, fire safety, and waste management of buildings. Moreover, the archaic and counter-productive planning policy of imposing minimum parking requirements, mostly accommodated in excavated underground carparks, further exacerbates risks to public safety.

Finally, it is worth pointing out that the PA is estimated to generate €16,000,000 in revenues in 2019 (MFIN, 2018). However, none of these funds are distributed to the other entities involved in the development permit application processes as external consultees, nor to the otherentities tasked with enforcing building and construction regulation, most notably the BRO and the OHSA.

This presents obvious problems for the industry whereby the approval of development permits in increasingly higher numbers is adding further strain on the building and construction oversight obligations of the latter entities which are not being matched with adequate funding. Meanwhile, the PA is flush with money which it is using to cosmetically mitigate for its failures to adequately plan through grants such as Irrestawra Darek for the conservation of heritage buildings, which falls under the remit of the Superintendence of Cultural Heritage.

SANITARY ENGINEERING OFFICE

A clear example of how the transfer of building regulation powers to the PA had already begun is the absorption of the **Sanitary Engineering Office (SEO)** within the PA.

Until 2016, the Sanitary Regulations, which regulate natural light, ventilation and drainage systems in buildings, formed part of the Superintendent of Public Health's remit. All planning applications were reviewed by the Sanitary Engineering Office (SEO), which was independent of the then Malta Environment & Planning Authority (MEPA) despite having an office within its building.

A critical aspect of building regulation now forms part of the planning process, a decision which was strongly opposed by the Kamra as being

short-sighted and detrimental to the establishment of proper building regulation;

It resulted in further consolidation of an archaic set of regulations, albeit marginally amended in 2016, based on arbitrary quantitative parameters - something which is nowhere to be found in the industrialised world; The remit of drainage regulation was divorced from the SEO.

SUPERINTENDENT OF PUBLIC HEALTH

Following the amalgamation of the SEO with the PA, the **Superintendent of Public Health** (**SPH**) is now solely responsible for enforcing Article 97 of the Civil Code dealing with waterproofing and drainage. Certification and enforcement of these critical building regulations is non-existent. There is legal uncertainty about whether this role has been taken over by the Environmental Health Directorate.

Nevertheless, even before the transfer of the SEO to the PA, breaches in sanitary regulations were considered infringements of permit conditions and dealt with by the PA's enforcement section - clearly a preposterous and unsustainable situation that has been endured for decades.

The SPH is also responsible for regulating sanitation in swimming pools through Swimming Pools Regulations³ published under the Public Health Act, and indirectly under the Control of Swimming Pools Regulations⁴. These two sets of regulations, both covering different aspects of swimming pools, fall under separate ministerial responsibility.

ENVIRONMENTAL HEALTH DIRECTORATE

The **Environmental Health Directorate** (**EHD**) falls within the remit of the SPH. It has the specific function of safeguarding public health in the built environment. Its main contact with *periti* is in the regulation of sanitation in tourism and catering establishments, particularly the provision of adequate hygiene in bars and kitchens, and the design of adequate lobbies in restrooms.

It is also responsible for investigating reports of infection due to contaminated water supplies, drainage leakages, and the presence of hazardous materials. This function is, however, limited to reactive action to safeguard public health. This means that it has no executive powers on private residences, except when such residences are leased⁵.

³ See L.N. 129 of 2005. ⁴ See L.N. 146 of 1998.

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⁵ Interview held with Clive Tonna, EHD Director on



As discussed in detail in the next chapters of this report, one of the main pieces of legislation currently regulating buildings is the Code of Police Laws. Most of the relevant provisions according to this law, however, fall under the remit of the Superintendent of Public Health, not the **Commissioner of Police**.

The Police's role is primarily centred on enforcing public safety and criminal investigations where citizens are injured or lose their life, or property is damaged as a result of works due to partial or full collapse of structures or falling objects. It is worth stressing that the Police do not intervene

if there is no death or injury, as the Kamra has all too often lamented.

SUPERINTENDENCE OF CULTURAL HERITAGE

The **Superintendence of Cultural Heritage** (**SCH**) was set up through the Cultural Heritage Act, 2002. The role of the SCH is that of fulfilling the State's duty of:

- 1. encouraging the integration of conservation and management practices with respect to cultural heritage at all levels of government, local government, the private sector and voluntary sector;
- 2. ensuring that conservation, management and other initiatives affecting cultural heritage take account of policies of social inclusion;
- 3. ensuring that conservation, land planning and other initiatives affecting cultural heritage areas take into account the social fabric of existing communities and strive to improve the living conditions for all levels of society. Such initiatives should ensure, where possible, that they do not precipitate negative changes to the social fabric of the population of any given locality intervened upon;
- 4. promoting public awareness of the richness and extent of cultural heritage as an intrinsic part of humankind's environment, and of the need to prevent the debasement of cultural heritage assets upon which depends the quality of that same environment, and of the cultural, economic and social reasons justifying its protection;

- 5. taking into consideration the special problems of cultural heritage conservation, maintenance and management in anti-pollution policies;
- 6. promoting fiscal and financial policies aimed at encouraging owners of cultural heritage to maintain, conserve, protect and make good use of such property.

As an external consultee of the development permit application process, the SCH has a strong influence on the development works that can be carried out in heritage buildings. Although the Planning Board and Commissions can overrule the SCH's consultation replies, the opinion of the SCH is valued by both *periti* and the decision-making bodies, and development proposals are normally revised to address the SCH's concerns.

The sixth duty listed above was in practice taken over by the PA through schemes such as Irrestawra Darek, the Marsamxett balcony grant, and the UCA stamp duty rebate.

While the Kamra recognises the paramount importance of the SCH in the protection of our cultural heritage, and in particular our built heritage, the Kamra is aware of a number of occasions where a narrow conservation paradigm was adopted, promoting absolute preservation with minimal intervention rather than promoting the re-use and adaptation of heritage buildings to meet modern requirements. This approach is not conducive towards achieving a balance between the need to conserve heritage buildings, and the protection of the building occupants' health and safety, energy conservation and accessibility.

It is recognised that the SCH plays an important role in successfully implementing the reforms proposed in this document, and it is thus important that it engages actively in this process. To do this, it must be properly staffed, financed and resourced.

CIVIL PROTECTION DEPARTMENT

The **Civil Protection Department** (**CPD**) was set up in 1999 to draw up plans for and respond to natural, industrial, or other emergencies. This includes fire rescue and firefighting.



The design and fabrication of buildings is critical in fire-related emergencies. Well-designed buildings facilitate the efforts of firefighters in the evacuation and rescue of building occupants in case of a fire, as well as the extinguishing of same. Of equal importance, is the prevention of fires.

In 2004, the Building Industry Consultative Council (BICC) published a reference document titled "Design guidelines for fire and safety in Malta". It provided periti with quantitative design parameters to be followed when drawing up project plans, including the siting and quantity of fire exits and stairwells, fire lifts and doors, the provision of fire-fighting infrastructure, such as water hoses and plumbing systems for the use of firefighters, access standards, etc. This document is now obsolete.

Compliance with these guidelines is assessed at planning application stage, by means of the submission of a fire-safety report by a fire engineer - generally a civil engineer (perit) or mechanical engineer - which is in turn reviewed by the CPD in its role as an external consultee of the PA. On approval of the development permit, the fire-safety report forms part of the development permit, and its implementation is mandatory for the issuance of the compliance certificate by the PA.

In 2017, the Civil Protection Act was amended to give powers "to take all necessary action, initiatives and setting of standards and code of practice as well as inspect and enforce regulations made in accordance with this Act for the prevention of fire in buildings of whatever nature, use or dimension".

To this end, a committee chaired by the PA was set up in July 2017 to review its processes on the basis of recommendations drawn up the CPD. The Kamra was part of this committee, however no tangible results came out of this process.

The Kamra tal-Periti's position has been consistently against the further consolidation of the current status quo characterised by inefficient fragmentation of building regulation and the ineffective post-occupancy checks. Indeed, there is currently no system in place for continued inspection and certification of fire-safety of buildings. Moreover, the current fire-safety design standards, which are now obsolete, are solely focused on fire rescue and the safety of building occupants when a fire starts, but is completely silent on the prevention of fires, including the use of materials and fabrics. This is a grave shortcoming of our regulatory system, which the Kamra finds deeply concerning, particularly when considering the complexity of certain projects of a commercial nature, and the advent of high rise buildings to our landscape.

61 N 88 of 2018

The Occupational Health & Safety Authority (OHSA) is tasked with protecting the health and safety of workers. As such, the role of the OHSA in the construction industry is primarily that of protecting workers on construction sites, including builders, electricians, labourers and *periti*. It does so through the Work Place (Minimum Health and Safety Requirements for Work at Construction Sites) Regulations, 2018⁶.

These regulations set out the several provisions to safeguard health and safety of workers on construction sites, including:

- 1. The developer is responsible for appointing a project super visor, whose role is that of drawing up plans prior to the com mencement of construction works to ensure the health and safety of workers on site, and to oversee that the plan is imple mented. In the absence of such appointment, the developer is assumed to takeon the legal responsibilities and liabilities of the role, whether s/he is qualified to do so or not. Domestic projects are in most cases exempt from this requirement.
- 2. The project supervisor is also obliged to retain on site a health & safety file, and to coordinate the works between different con tractors to ensure the health and safety of workers.
- 3. The developer is responsible for ensuring that contractors main tain good order and cleanliness on site;
- 4. The developer is also responsible for maintenance, pre-commis sioning checks and regular checks on installations and equip ment:
- Contractors are responsible for ensuring that workers are not ex posed to excessive noise or work in temperatures that are "not appropriate for human beings", without establishing minimum thresholds or providing clear definitions.

It is pertinent to once again point out that the project supervisor as defined in these regulations does not necessarily also fulfil the roles of site manager as defined in the previous section. In practice, it is seldom the case that the two (or three) roles are performed by the same person.

The OHSA also has an important role in building regulation insofar as



safety in workplaces are concerned.

Legal Notice 44 of 2002 overlaps with regulations issued by other agencies, departments and authorities:

- a) Regulations 5 and 7-9 regulate fire prevention, rescue, toxic fume generation, emergency signs and other similar aspects in workplaces. These regulations, which came into force before the BICC fire safety guidelines discussed above adopted by the CPD, provide further fragmentation and overlap, with scope for inconsistency between various pieces of legislation, conflicting responsibility for oversight and enforcement, duplication of roles, significantly more bureaucracy, and greater risk for error or omission at design, implementation and post-occupancy stage;
- b) Regulation 6 requires certification from a *perit* that the structure of the building is adequate to support the plant and equipment placed within it;
- c) Regulations 10, 11, 12, 13, 14 and 15 cover ventilation, thermal comfort, illumination, risk from falling, security, and access, respectively. These are all aspects of building regulation one would expect to find covered within a consolidated building code, providing far more detailed quantitative and qualitative standards.

Legal Notice 293 of 2016 also regulates goods lifts, escalators, moving walkways and boilers in work places, among other things. These are all building components that would normally otherwise be regulated through wider regulation also applicable to the general public.

COMMISSION FOR THE RIGHTS OF PERSONS WITH DISABILITY

The Commission for the Rights of Persons with Disability (CRPD) was established through the Equal Opportunities (Persons with Disability) Act in 2000, which was replaced by another act with the same name in 2016. The CRPD's specific functions are set out in Article 22 of the Act. They are far reaching in terms of the protection and advancement of rights of persons with disability and combating discrimination against them. Despite not being explicitly laid out in the Act, the CRPD has taken on the role of regulating buildings in terms of access for persons with disability.

2.13.

It does so by publishing a periodically updated design guidance document - the Access for All Design Guidelines. Despite the name, this document is prescriptive and mandatory in nature. It is enforced by the CRPD in the following ways:

- a) As an external consultee in the Development Planning Act, the CRPD can object to any planning application that does not comply with the guidelines;
- b) Permit conditions generally require compliance certification prior to occupation. CRPD inspectors and/or external consultants are brought in on practical completion of the project to inspect and report on the adherence to the Access for All guidelines. Any shortcomings would need to be rectified prior to the issuance of the compliance certificate;
- c) The CRPD has the authority to inspect all public buildings at its discretion, whether in response to a report made by the public or otherwise, to ensure conformity with its Act.

While PA circulars⁷ limit the applicability of Access for All guidelines, the anti-discrimination powers conferred on the CRPD overrule any planning permission that may be granted by the PA. Indeed, the CRPD may intervene to shut down public buildings or spaces that limit access to persons with disability, despite any exemptions afforded by the PA.

MALTA COMPETITION & CONSUMER AFFAIRS AUTHORITY

The Malta Competition & Consumer Affairs Authority (MCCAA) Act, 2011 amended in 2015, brought about the merger of four separate public entities: the Malta Standards Authority, the Consumer & Competition Division, the Technical Regulations Department, and the State laboratories.

The MCCAA is currently composed of four divisions:

- 1. Office for Competition;
- 2. Office for Consumer Affairs;
- 3. Technical Regulations Division (TRD);
- 4. Standards & Metrology Institute (SMI).



8 See J. N. 462 of 2011

000 L.N. 402 01 2011.

This heterogenous authority has a direct impact on the regulation of buildings. Unlike other public entities, however, it is not an external consultee of the PA during planning application processing, which is indicative of the inconsistency with which building regulation is managed. Nevertheless, the Kamra tal-Periti is not advocating that the MCCAA should be listed as an external consultee.

The SMI is the national authority tasked with the responsibility of transposing European standards in Malta. This includes construction standards and Eurocodes which are used on a daily basis by *periti* in the exercise of their profession. The SMI is also equipped with laboratories for testing of building and infrastructure works carried out through public procurement, or by the Police for forensic investigations.

The TRD is the national body tasked with enforcing the Product Safety Act, 2001. This includes construction products, lifts, air-conditioning systems, and the eco-labelling of products.

The Construction Products (Implementation) Regulations, 2011⁸ transpose European Regulation 205/2011 governing the safety of construction products in17 the European Market. Despite these regulations, there appears to be negligible oversight and enforcement of construction products manufactured locally. Indeed, virtually no products, whether masonry blocks, hollow concrete bricks, concrete precast products, wood shuttering, window apertures, timber products, asphalt mixes, aggregate, steel reinforcement, etc., are ever sold with the obligatory certification.

MALTA TOURISM AUTHORITY

The **Malta Tourism Authority** (**MTA**) is responsible for licensing hospitality establishments, including hotels, bars, restaurants and kiosks. The Tourism Establishment Regulations, 2012⁹, and Catering Establishment Regulations, 2004¹⁰, set out minimum requirements that must be met for the issuance of a licence to operate.

Among the requirements are specific regulations on the physical characteristics of buildings, such as layout and materials that affect health and safety of patrons and employees. Many of these aspects are already covered by the PA, EHD, CPD and OHSA regulations.

This type of multiple overlaps leads to lack of coordination and contradiction between various public entities.

⁹ See L.N. 351 of 2012. ¹⁰ See L.N. 175 of 2004 **Enemalta plc**, Malta's sole energy provider, also acted as the regulator for electricity installations in the country until 2016, when the Regulator for Energy and Water Services Act, 2015, came into being. The role of Enemalta included the enforcement of the electrical installation regulations, and the review of planning applications.

Despite legislative changes removing its regulatory powers, Enemalta is still listed as an external consultee of the Planning Authority and takes an active part in the planning application process, including imposing requirements for the inclusion of substations in proposed developments. Enemalta is a part-privatised publicly listed company since 2014, which makes it in turn subject to public regulation, exposing it to manifest conflicts of interest.

WATER SERVICES CORPORATION

A similar regulatory situation to that of Enemalta exists with the **Water Services Corporation** (**WSC**). The main difference between the two organisations is that the latter is wholly owned by the State. Nevertheless, the WSC is itself also subject to regulatory oversight by the Regulator for Energy & Water Services, making its position as an external consultee of the Planning Authority highly questionable.

REGULATOR FOR ENERGY & WATER SERVICES

Article 5 of the REWS Act establishes the functions of the **Regulator** for Energy and Water Services (REWS) and gives wide ranging responsibilities to the Regulator, essentially involving the regulation of practices, operations and activities in the energy and water sectors. This includes the regulation of tradesmen and service providers such as electricians, installers of renewable energy systems and competent persons in the water and energy sectors.

REWS also provides incentive schemes for the implementation of energy efficiency measures in existing residential buildings (but not their common parts) used as primary residences, including the installation of photovoltaic panels, solar water heaters, insulation, double-glazing, rehabilitation of water cisterns, and heat pumps.

The schemes have one major flaw: they treat building components in isolation, rather than establishing minimum energy performance



¹¹ See L.N. 146 of 1998

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parameters to be attained following the retrofitting interventions in the buildings as a whole. Thus, the efficacy of the schemes is greatly diminished.

REWS is also responsible for issuing annual licences for swimming pools under the Swimming Pools (Control) Act and Control of Swimming Pools Regulations¹¹, which are primarily focused on the protection from effluent contamination of sea water.

ENVIRONMENT & RESOURCES AUTHORITY

The **Environment & Resources Authority** (**ERA**) was established in 2016 following the demerger of the Malta Environment & Planning Authority (MEPA). The Environment Protection Act, 2016, stipulates ERA's functions, as follows:

- To mainstream environmental targets and objectives across Government and society;
- To take the leading role in advising Government on environmetal policymaking at the national level, as well as in the context of international environmental negotiations;
- To develop evidence-based policy; backed by a robust data gathering structure;
- To draw up plans, provide a licensing regime and monitor activities having an environmental impact and to integrate environmental considerations within the development control process.

ERA plays an important role during the planning application process, particularly in minimising the environmental impacts of large-scale Schedule 1 development by governing the EIA process.

It also had an indirect bearing on building and construction regulation since it is also tasked with waste management, treatment and disposal of hazardous waste, the attenuation of noise pollution and the protection of groundwater. It is, however, directly responsible for issuing annual licences for swimming pools under the Swimming Pools (Control) Act and its subsidiary legislation, which are primarily focused on the protection from effluent contamination of sea water.

The Energy & Water Agency (EWA) was set up in 2014 through L.N. 340 of 2016. Its responsibilities are:

- the design, development and cohesive coordination of conventional and alternative energy policies and measures together with water policy and secure governance across and within Ministries, Departments and government entities;
- the monitoring, reviewing and updating of conventional energy, alternative energy and water conservation in accordance with European Union and international requirements;
- leading and coordinating co-funded projects relating to conventional energy, alternative energy and water across Ministries;
- the design, development and management of a sustained knowledge, education, information and communications framework directed to influence behaviour with regard to alternative energy use;
- the drawing up of legislative proposals in support of national policies as necessary;
- any other initiative or activity that is complementary and conducive to the fulfilment of the responsibilities of the Agency; and
- the general regulation of its own procedures provided it does not violate the provisions of any other law.

It is unclear why the need was felt to set up a separate agency to fulfil a remit that is already largely covered by the BRO, BRB, PA, REWS and ERA.

BUILDING INDUSTRY CONSULTATIVE COUNCIL

The **Building Industry Consultative Council** (**BICC**) was set up as a forum for industry stakeholders, including public sector agencies, developers and professional chambers to advise Government on industry-related policy.

NTRODICTION

In 2013, it was reformed to take on a more executive role particularly in the establishment of the skill cards and training courses for various industry trades.

It has also recently been tasked with the formulation of the legislation for the setting up of the Building & Construction Authority, however this function seems to have not yielded the expected targets, and was subsequently transferred to the Building and Construction Agency.

COURTS OF JUSTICE

The **Courts of Justice** have an important role to play in building regulation, particularly in the current legal framework characterised by obsolescence and uncertainty about liability. The Courts establish liability in civil and criminal cases on the basis of due care and the exercise of the "art and profession". Court-appointed experts, generally periti in construction related cases, tend to base their recommendations to the judiciary on foreign building codes or personal professional judgements. The establishment of unambiguous and up-to-date building regulations with clear lines of responsibility would greatly facilitate the Courts' processes, in the Kamra's view, and would eliminate the current unacceptable situation whereby standards are set through case law, rather than through studied and researched standards and regulations.

MASONS' BOARD

The **Masons' Board** is set up through Article 96 of the Code of Police Laws. It is empowered to examine applicants for a masons' (or builder's) licence, but provides no detail whatsoever about the minimum course requirements, minimum skill and competence outcomes necessary, obligations of insurance, and critically the retention and publication of a register of licensed masons. Moreover, there are no provisions on how and in what circumstances a licence can be repealed.

It is also pertinent to point out that, Article 5 of the Building Regulation Act, 2011, states that "[t]he Building Regulation Office shall be the entity responsible to issue licences for masons". The BRO has informed the Kamra that this section of the Law was never brought in effect. The Masons' Board is still currently responsible for examining applicants, while licences are apparently issued by the Works Division. After dogged persistence by the Kamra tal-Periti over several years, culminating in a motion to this effect by the Kamra's Extraordinary General Meeting of June 2019, a register of licenced masons was finally published,

ironically during the same General Meeting and barely two hours before the conclusion of the public consultation process on the draft of Legal Notice 136 of 2019.

According to its records, the Kamra tal-Periti was never approached by the Masons' Board or the BRO to assist in keeping the curriculum of masons' courses updated. It is, however, clearly evident that such curriculum is wholly insufficient to cater for the skills currently required of masons on construction sites, including knowledge of reinforced concrete, formwork erection, steel work, and other complex processes required of today's building industry.

LOCAL COUNCILS

Local Councils are empowered through L.N. 119 of 2002 to issue licences to developers and/or contractors for the following construction activities:

The deposit of building or other material in the street;

- 1. The deposit or use of crane or other machinery, including lifters
- 2. and tower ladders, during the erection, construction, or demolition of a building;
- Temporary road closures, whether partial or complete, to allow for 3. machinery and equipment.

PROFESSIONAL CHAMBERS & WARRANTING BOARDS

The **Kamra tal-Periti** and the **Chamber of Engineers** (**CoE**) play a crucial role in the building and construction industry. They do this in a number of ways by:

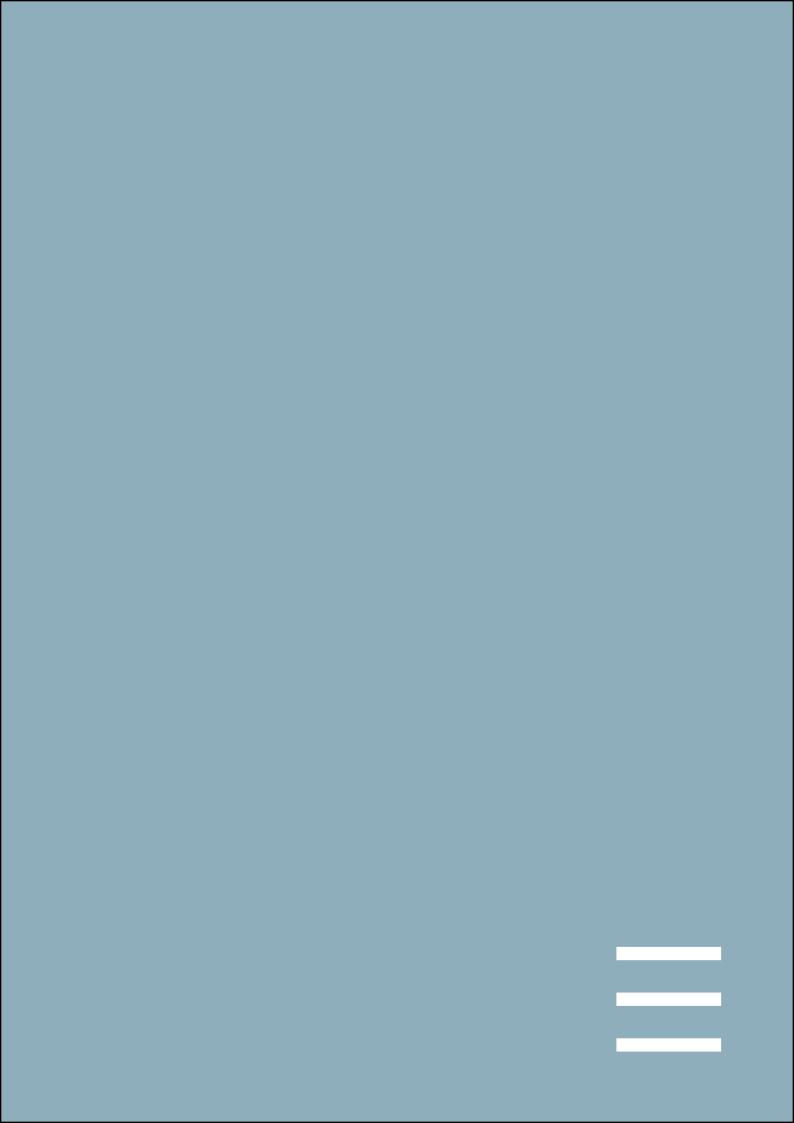
- 1. Advising Government on industry-related public policy;
- 2. Regulating members of their respective professions;
- 3. Providing professional guidance and organising continued professional development (CPD) courses;

In addition to the above, the Kamra tal-Periti is also tasked with enforcing the Code of Professional Conduct, and with investigating claims of professional negligence and misconduct, as well as recommending the suspension or revocation of professional warrants.



¹² See Directive 2013/55/ EU The **Periti Warranting Board** and the **Engineering Board** are the two national authorities tasked with assigning professional warrants on the basis of competence, which is assessed in accordance with the EU's Professional Qualifications Directive¹², including course content, experience gained during a minimum one-year on-the-job professional training, and an oral examination.

current building regulation in malta



Malta's building legislation largely dates back to the mid-19th Century when efforts were made throughout the British Empire to curb the devastating outbreaks of cholera caused by poor sanitation, overcrowding and environmental degradation. Edwin Chadwick's Report on Sanitation Conditions (1842), which reviewed the urban condition in Greater London at the end of the First Industrial Revolution, was the precursor to Malta's Sanitary Regulations of 1865, which remain largely unaltered to this day. The Code of Police Laws, of which the sanitary regulations were a part, also cover aspects such as damp proofing and drainage.

While in most Commonwealth countries sanitary regulations evolved into two separate and distinct public policy and regulatory frameworks, town planning and building regulation, in Malta the latter was never addressed comprehensively and coherently, while town planning is virtually non-existent with the focus being exclusively devoted to development control. The result is a heavily fragmented regulation system which is deeply reliant on the planning application process for implementation. The effects of this are:

- A planning system which is over-focused on development control, rather than on actual planning and urban design outcomes;
- Multiple building control systems, each with inadequate human and financial resources, unable to regulate building performance and compliance post-occupation;
- Excessive reliance on the discretion, skill and experience of var ious operators in the construction industry, most notably the perit.

The term "is-sengħa u l-arti" (skill and technique) became a convenient legal substitute for a full suite of building regulations covering every aspect of health and safety in buildings. Indeed, the Laws of Malta are completely silent on various critical aspects of this field, most notably structure¹³. While periti follow the relevant Eurocode standards for the design of building structures, there is no enabling legislation which requires periti to do so, as happens in other European countries. Thus, Maltese architects and civil engineers apply professional discretion each time they design buildings in accordance with Eurocode standards. The same applies for other building components, including, but not limited to, handrails, apertures, insulation, waterproofing, and plumbing systems, where no regulations exist. Whatever regulations exist are prescriptive

¹³See Section 1.4 for more detail. and not performance-based, and therefore become rapidly obsolete, and irrelevant, as well as inhibiting innovation.

This legal vacuum is no longer tenable, particularly in view of the sudden surge in the approval of high-rise buildings in Malta in recent months. The Grenfell Tower fire that occurred in London on 14th June 2017 ought to have further heightened the industry's concern about the urgent need for comprehensive regulation and building control processes that monitor buildings during the construction and post-completion/occupation phases. The planning application processes are not equipped to fulfil this role, nor, in the Kamra's view, should they.

BUILDING REGULATION IN MALTA

A brief synopsis of the various pieces of building regulation scattered throughout the laws of Malta is outlined in the final part of this chapter.

STRUCTURE

Readers of this report might be surprised to note that the structural integrity of buildings is completely unregulated in Malta. Indeed, there are no building regulations bringing into force the various Eurocodes on structural design and loading, the use of concrete, steel, timber, masonry, aluminium and composite materials in structural engineering, geotechnical engineering and foundations, and anti-seismic design. The **National Annexes for Malta** for the most important parts of the Eurocodes have been published for public comment, (except for wind actions and seismic actions, for which more local data is required), but have not, for some reason, been published officially yet. The Eurocodes contain, nevertheless, recommend default values which can be used in the absence of specific national parameters. However, the regulatory framework for the use of the Eurocodes is still lacking.

The absence of enabling regulations and institutional ownership of this critical aspect of public safety is alarming. The only indirect mention of structure in the Laws of Malta is found in Article 1638 (1) of the Civil Code which states that "[i]f a building or other considerable stone work erected under a building contract shall, in the course of fifteen years from the day on which the construction of the same was completed, wholly or in part, or be in manifest danger of falling to ruin, owing to a defect in the construction, or even owing to some defect in the ground, the architect and the contractor shall be responsible therefor."

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¹⁴ Article 400 (1) of the Civil Code defines easement as "a right established for the advantage of a tenement over another tenement belonging to another person, for the purpose of making use of such other tenement or of restraining the owner from the free use thereof".

¹⁹Salvatore Vella vs Felice Camilleri; Carmelo Cassar Torregiani vs Giuseppe Scifo Diamantino; Vittoria Grama vs Paolo Vassallo; Nicola Caruana vs Dr John Cesareo. This open-ended article in the Civil Code places disproportionate liability on *periti*, not only in terms of duration but also scope. In an age of multi-disciplinarity and complex structures, the role of project *periti* has increasingly moved towards design management, coordinating the various professional inputs into a project from design architects, structural engineers, geotechnical engineers, building services engineers, fire engineers, interior designers, surveyors, and various other consultants. Furthermore, the basis for professional liability on a subjective term such as "defect" is grossly inadequate in the 21st Century - a time in which Malta is embarking on ever taller buildings and more complex civil engineering projects. The approach to geotechnical problems when ever-deeper excavations are increasingly common, even adjacent to existing buildings, is based on outdated notions without reference to current knowledge of the science.

Indeed, while excavation is one of the riskiest processes undertaken in a construction project, it is not regulated at all. In the absence of any regulation, the Courts have latched onto a provision in the Civil Code that deals with easements¹⁴ to try to address this lacuna. Article 439 of the Civil Code states that "[i]t shall not be lawful for any person to dig in his own tenement, any well, cistern or sink, or to make any other excavation for any purpose whatsoever at a distance of less than seventy-six centimetre from the party-wall". It precedes Article 443 which regulates distances of windows and balconies from party walls.

The regulation was never intended to guarantee public safety nor to serve as a regulation on excavation works. Evidence of this lies in the fact that Article 560 provides for the acquisition of rights "by virtue of an agreement". Indeed, various judgements clarify that legal distances are a private utility as per Article 439 and can be modified or renounced, even tacitly, by the parties. If the provisions of legal distances were about "public utility" or public safety, the obligations would not be extinguished in such a manner, but would subsist indefinitely or until such regulation is changed. Article 402 (1) further states that "[e]asements created by law for purposes of public utility are established by special laws or regulations". No such laws exist on structural design or excavation. Nevertheless, the Courts have consistently held that non-adherence to this requirement is a possible cause of damage or collapse, despite there not being any technical research to support this notion.

The lack of building regulation on structures, and the opacity and inconThe lack of building regulation on structures, and the opacity and inconsistency in the existing laws and their interpretations place architects and civil engineers in an impossible position to practice their profession serenely.

A national building regulation code on structures instead of scattered provisions in various laws would provide greater legal certainty to all stakeholders in the industry.

The fragmentation of building regulation in Malta is all too apparent when it comes to fire safety. **There are three sets of regulations** that regulate this aspect - L.N. 44 of 2002 (Occupational Health and Safety Authority Act), S.L. 409.15 (Catering Establishment Regulations), and S.L. 409.11 (Holiday Premises Regulations). There are also passing references to fire safety measures in S.L. 10.40 (Maintenance at Good Order at Places of Entertainment) and L.N. 351 of 2012 (Malta Travel and Tourism Act).

The Development Planning Act 2016 identifies the Civil Protection Department (CPD) as an external consultee of planning applications. The CPD reviews fire engineer certifications submitted with planning applications to ensure compliance with the Design guidelines on fire safety for buildings in Malta published by the BICC in 2004, which is essentially a word-for-word transposition from the English building regulations. Fourteen years since its publication, this document was never revised. Meanwhile, European and international standards have been reviewed and updated several times since.

The main concern of the Kamra tal-Periti with the concept of regulating fire safety and fire prevention through the planning process is that it limits the ability of the State to ensure continued compliance with regulations throughout the building's lifetime. It also denies the possibility of using modern fire engineering approaches to design of structures. Indeed, the fire safety regulations currently in place are mainly focused on fire rescue. Fire prevention is completely absent, arguably because it is impossible to implement through basic planning application drawings which are mere translations of design concepts, submitted to the Planning Authority prior to the preparation of detailed construction drawings.

The CPD Act 2017 regrettably further consolidates the status quo characterised by fragmentation of building regulation and a piecemeal approach to this sector.

SITE DECONTAMINATION

Regulations on site decontamination are important to protect building occupants from the risks arising from site contaminants, as a result

of any substance, in solid, liquid, gaseous or vapourised state, which may be harmful to persons or buildings, including substances which are corrosive, explosive, flammable, radioactive, or toxic.

Site preparation regulations covering site investigations are also important to ensure the structural stability of the buildings. This includes geotechnical and laboratory testing of soil and rock formations, and sub-soil drainage. The latter is critical to prevent contamination of the building, its foundations or its services.

Malta has no such regulations to date despite the close proximity of industrial and agricultural activities, which are key sources of ground contamination, to areas zoned for residential and commercial activities.

WATERPROOFING

Waterproofing in buildings is regulated through **Article 97 of the Code of Police Laws (Chap. 10)**. These regulations date back to the mid-19th Century and are now obsolete, having been surpassed by advances in material and construction technology. Indeed, these regulations still make reference to building materials which are no longer in use, such as lead, vitrified bricks and asphalt, and building techniques such as ventilated basements and cavity walls for the restriction of damp from the ground and through external walls, respectively.

The only regulation covering waterproofing of roofs is a generic requirement to lay an impervious surface to falls to avoid puddling.

TOXIC MATERIALS AND SUBSTANCES

Some construction materials present in buildings have been found to be hazardous, posing a very serious risk to building occupants. The most notable of these are asbestos and lead. While the importation of these materials is restricted, there are no regulations covering risk mitigation or elimination to exposure of these and other toxic materials.

Moreover, certain types of insulation and other building materials produce toxic fumes, such as urea formaldehyde, requiring specific regulation for their inclusion in the building fabric.

The only existing regulation on toxic materials in buildings is **L.N. 323 of 2006 which treats the exposure to asbestos as a workplace hazard**, rather than a hazard inherent to a building which exposes its occupants

to health and safety risks. Moreover, this regulation falls under the remit of the OHSA, which deals with workplaces. Asbestos in residential properties is not covered by this regulation.

Toxic substances are also used in buildings on a regular basis as a matter of necessity. They include chlorine in swimming pools, and fertilisers and pesticides in landscaped areas. There are currently no regulations on how to prevent such substances from contaminating the ground and nearby buildings by means of specific measures at design and construction stage.

SOUND INSULATION

The contemporary living environment is characterised by low-quality sound that has little or no importance. The sounds of cars, planes, cooling systems, ventilation, machines, electronically amplified music and announcements are constantly present. Gating out these sounds can consume a significant fraction of cognitive resources, and the body is frequently triggered in vain to prepare for fight-or-flight. Moreover, the information carried by this sound—mainly related to its source—influences our appraisal of our person-environment relationship. The feeling of not being in control of one's living environment can lead to additional stress particularly in the absence of coping resources or mechanisms. Both the autonomous response and stress path could eventually lead to negative effects on health and wellbeing, such as an increased risk of high blood pressure or circulatory disease (European Commission, 2015). Noise pollution can contribute to various health problems, including:

- Tension or anxiety;
- Decreased performance;
- Reduced productivity;
- Eardrum damage or hearing difficulties;
- Increased blood pressure or stress levels;
- Coronary failure;
- Psychological damage.

The World Health Organisation (WHO) reports that sleepers that are

exposed to night noise levels above 40dB on average throughout the year can suffer health effects like sleep disturbance and awakenings. Above 55dB long-term average exposure, noise can trigger elevated blood pressure and lead to ischaemic heart disease (WHO, 2018).

To date, Malta has no regulations to curb noise generation or to limit its impact within buildings. The importance of introducing noise control building regulation cannot be stressed enough. The Kamra tal-Periti understands that the government has set up a Commission for Noise Pollution. A spokesman of the Ministry for the Environment is reported by the Times of Malta as having said that a draft bill will be presented proposing "regulatory framework aimed at minimising noise inconvenience" (Caruana, 2018). The Kamra trusts this will not lead to yet another regulatory body governing buildings which will further exacerbate the unsustainable fragmentation of building regulation in Malta.

More recently, the ERA was tasked with the drafting of a Noise Action Plan in accordance with the requirements of Directive 2002/49/EC relating to the assessment and management of environmental noise (END). This plan will address environmental noise from aircraft, industry and roads. The END was transposed through the "Assessment and Management of Environment Noise Regulations, 2004" (Subsidiary Legislation S.L. 549.37; Legal Notice 193 of 2004, as amended). The Environment and Resources Authority (ERA) is the competent authority for the implementation of these Regulations.

VENTILATION

Ventilation is regulated primarily through the **Health & Sanitary Regulations**, **2016**, which provide prescriptive dimensions and layouts for residential and commercial developments. They are essentially a slight modification of the Sanitary Regulations found in the Code of Police Laws, articles 97, 99, 104 and 108, written in the mid-19th Century, echoing similar regulations brought into force throughout the British Empire at the time. It is pertinent to point out that the aforementioned articles in the Code of Police Laws have not been repealed with the introduction of the 2016 regulations, providing some degree of ambiguity.

The 2016 regulations form part of the 2016 Development Planning Act subsidiary legislation, and as such fall under the Planning Authority's remit, despite the fact that they have no direct relevance to planning, aesthetics or land use.

The main novelty in the 2016 regulations is the possibility to deviate from prescriptivity in non-residential buildings through certification "by a warranted engineer that [the proposed design] can achieve acceptable levels of ventilation in accordance with recognised building codes and standards". There are a number of considerations to be made on this point:

- 1. There are no building codes or performance standards on ventilation in Malta. Thus, there is a complete reliance on foreign codes, which do not cater for local climate, environment, materials and construction methodology;
- 2. It is unclear what the term "recognised" means. Who should they be recognised by? Neither the Kamra tal-Periti nor the Chamber of Engineers the only two professional bodies that represent warranted engineers in Malta officially recognise any foreign building codes and standards. It is thus incumbent on the warranted engineer to exercise discretion and professional judgement in the choice of foreign building codes and standards;
- 3. Foreign building codes vary widely both in substance and in effect. Many are performance-based, while only a few are prescriptive. In both cases, however, they frequently rely on continued or periodic review and certification, none of which occurs in Malta in a systematic manner;
- 4. Civil engineers expose themselves to additional and wholly unnecessary degrees of professional liability through the current regulatory regime in Malta. Not only do they carry the normal liability as their foreign peers in applying the building code correctly, but they also carry the responsibility of selecting the code to be applied. In all advanced industrialised countries, it is the State that carries responsibility for the latter.

SANITATION, PLUMBING & HOT WATER

Regulations for sanitation in Malta are found in the **Code of Police Laws Article 97 (g)** which states that "every house ¹⁶ shall be provided with a privy". Clearly archaic even in terminology, the regulations focus primarily on ventilation, wastewater and drainage in privies, but make no reference to the supply of water in bathrooms, kitchens, washrooms, and

includes any premises used, or intended to be used, either wholly or partially for habitation purposes, or for purposes of animal husbandry, any hotel or catering establishment, and any shop other than a stall or bincle.

landscaped areas.

The provision of just one toilet per house (including homes, hotels and offices) as required in the Law is clearly insufficient in the 21st Century. However, the provision of sanitation in hotels and catering establishments is regulated through the respective licensing regimes, while that of workplaces is regulated through L.N. 44 of 2002. The provision of sanitary facilities in homes generally follows market demand.

The regulatory fragmentation is manifest with various authorities regulating sanitation in some building types, but not others, with some scope for overlap. The Malta Tourism Authority (MTA) is responsible for regulating sanitation in hotels and catering establishments, while the Occupational Health & Safety Authority (OHSA) regulates workplaces.

WATER CONSERVATION

Malta has no specific building regulation aimed at reducing water consumption. Regulation 10 of the Health & Sanitary Regulations, 2016, however stipulates that "[a]II new development should be provided with a water reservoir to store and re-use rainwater runoff from the built-up area and having a volume that is established in Technical Guidance Document F".

The link between sanitation and water reservoirs is not immediately apparent; however, there is a probable explanation in the historic origins of the current sanitary regulations' regime, which as explained earlier, dates back to the mid-19th Century. The high demand for water that characterised British Rule caused by increased urban densities and improved standards of living, led to the introduction of legal provisions in the Civil Code and Code of Police Laws aimed at conserving water and preventing its contamination (Sapiano, 2008).

Over the last four decades, it has become common practice for each tenement to have a water tank placed on the roof. This practice, which emerged as a result of severe shortages in tap water in the post-Independence period leading up to the 1990s, survives to this day despite water shortages no longer being a concern due to the significant infrastructural investments in reverse-osmosis plants in the 1990s and 2000s.

Despite there being two sets of regulations published and administered by two different public entities (SPH and REWS) about swimming pools, there are no requirements for water conservation measures in pools, 2.11

Sewerage systems are regulated by the **Code of Police Laws** and subsidiary legislation "**Construction of Houses and Drains**" published in the British Colonial Period. They are largely ignored by the industry today due to their obsolete requirements for iron or glazed stoneware pipework, privies, cesspools, and stone seats instead of toilets.

Nevertheless, the existing drainage regulations restrict the application of more contemporary installation techniques such as closed systems, and other more innovative solutions such as self-powered treatment plants, and recycling of greywater.

WASTE MANAGEMENT AND DISPOSAL

There are currently no formal building regulations about waste management and disposal. There is however an interim measure currently in place in the PA's Development Control Design Policy, Guidance and Standards 2015 (DC15). **Policy P46** states:

"New multiple dwellings and high-density residential development serving 16 or more units will be required to make provision for a refuse room catering for the whole development which must be easily accessible from street level. The size of the room will be dependent on the number of dwellings being served and will be equipped with both organic waste and recycling bins."

"This policy is an interim policy pending the approval of the Building Regulations."

Needless to say, five years on, no building regulations have been brought in force.

The Abandonment, Dumping and Disposal of Waste on Streets and Public Places or Areas Regulations¹⁷ regulate the system of domestic waste collection, including Local Council waste collection times and the type of waste that can be left on pavements for such collection. Non-domestic waste, all catering waste and swill, irrespective of quantity, and building waste cannot be deposited in streets and collected with domestic waste. It is thus incumbent on commercial operators to organise private waste collection in accordance with the Waste Regulations¹⁸.

¹⁷ L.N. 344 of 2005.

The above implies that all non-domestic developments, irrespective of size or scale of operation, should accommodate a waste storage facility within the site. There are no regulations or guidance documents on the size of such facilities or on related measures for fire prevention, ventilation and prevention of ground contamination.

Informal discussions with private waste collection operators have confirmed that the reason why commercial waste collection has never taken off is because Local Council tenders are cheaper when domestic and non-domestic waste is collected together, never mind the fact that the two types of waste should be treated separately, and are contributing to the general shabbiness of our urban environment. Unfortunately, Local Councils are breaching the law to the detriment of the environment for financial gain.

COMBUSTION APPLIANCES & FUEL STORAGE SYSTEMS

Articles 128 to 132 of the Code of Police Laws regulate combustion appliances, such as ovens, furnaces, boilers, fireplaces, and fuel storage systems. These legal provisions, however, provide no design standards or guidance other than prohibiting their positioning along party walls. The only quality verification that is required by the law is that of the appointment of an engineer by the Minister to inspect and test boilers on the second and fourth quarter of each year, at a preposterous fee of €2.33 per inspection. It is also unclear against which standards and regulations the engineer is expected to certify the boiler installation. The extent to which this section of the law is observed is dubious.

PROTECTION FROM FALLING, COLLISION AND IMPACT

A key aspect in building design and fabrication is ensuring that users are not

- a) Geometry of stairs, handrails, fixed ladders, and guarding;
- b) Ramps and guarding;
- c) Protection from falling, including from accessible roofs, wall openings, and slab edges;
- d) Vehicle barriers and loading bays;
- e) Protection from impact with glazing;
- Design of external openings to ensure safe opening, and safe access for cleaning.

exposed to risks from falling, collision or impact. This includes regulating: The only guidance that is provided on this aspect is found in three official documents or regulations:

DC15 guidance G46 (e) states that "where desirable, balcony railings should have a vertical orientation in order to ensure safety". This is clearly inadequate to safeguard the safety of building users, as there is no mention of the minimum impact load a railing is to sustain whichever way it is manufactured, nor other important safety factors such as the spacing between the vertical rails.

L.N. 44 of 2002 regulation 13 stipulates that "[t]he employer shall take all the necessary steps to ensure that all floors, steps, stairs, passages, gangways and traffic routes are of sound and suitable construction and properly maintained, and they shall be kept free from any obstruction, from any defect in the surface, and from any substance likely to cause persons to slip, trip, fall or otherwise cause accidents." There is no mention, however, of any performance- or prescriptive-based criteria on how this is ensured.

 L.N. 79 of 2016, which transposes European lift regulations EN 81-20:2014, establishes specific minimum performance criteria of impact loads to be withstood by lift wells and doors. It also specifies design criteria for protection from falling of lift technicians inside lift shafts.

ENERGY CONSERVATION

The Energy Performance in Buildings Regulations¹⁹ transposes the provisions in European Directive 2018/844 which came into force on 9th July 2018. They set out comprehensive regulation on minimising the energy demand of buildings as part of the EU's 2020 agenda and the Paris Accord to reduce CO2 emissions across the European Union.

- a) The main provisions of these regulations include:
 The methodology for calculating energy performance in buildings;
- Making the BRB responsible to establish minimum energy performance in buildings, including cost-optimisation criteria;
- c)

1.

The obligation for new-builds and major refurbishments to meet Document F requirements, placing greater responsibility for adherence to its provisions on *periti* and engineers, including the requirement for *periti* and/or engineers to submit compliance certification within one-month from completion, and before building occupation;

- d)

 The enforcement of the provisions to ensure that all public buildings achieve near-zero energy building status (nZEB) by end 2018, and all other buildings by end-2020, which requirement remains largely unsatisfied;
- e)
 Empower the BRO to provide financial incentives and address market barriers to promote nZEB stock (presumably replacing REWS in this role);
- The reinforcement of obligations to produce EPCs for design and asset ratings, and obligation to display such certificates;
- g)
 A system for regular inspection of heating and cooling systems under the remit of the BRO (presumably instead of the MCCAA);

Compliance with and enforcement of the European Directive on nZEB is virtually nil.

The principal deficiency in the energy performance rating is the calculation software, known as EPRDM software, which makes use of outdated efficiency constants, and does not cater for vernacular passive design solutions.

The Energy Performance in Buildings Regulations makes reference to the application of minimum requirements for the energy performance of existing buildings which are subject to renovation. Existing buildings are defined as any building constructed, in the course of construction, earmarked for construction, or having a valid development permit, prior to the coming into force of these regulations. Heritage buildings, therefore, fall within the category of existing buildings and a certificate of compliance with minimum energy performance requirements, drawn up by an assessor, must be submitted to the Building Regulation Office within one month of completion of works or before the use of the building.

L.N. 47 of 2018 specifies that the Building Regulation Board must

differentiate between new buildings, existing buildings and different categories of buildings. Therein lies the opportunity to address the anomalies particular to the eco-refurbishment of heritage buildings in the local context. The heritage building typology, prolific in Malta, is characterised by inherent passive strategies designed to improve internal comfort conditions. Although it has been shown to offer huge potential in reducing energy demand at a national level, several components must be considered in the design of eco-refurbishment interventions (Wismayer, et al., 2016).

The Sustainable Regeneration of Built Heritage (SRBH) Initiative²⁰ has identified and assessed integral aspects in the process of sustainably intervening on heritage buildings through field research on San Anton Palace (Schembri Orland, 2019). One of the main recommendations of the SRBH project is the development of a national framework within which a balanced strategy may be effectively implemented, and through which interventions on heritage buildings may be founded on evidence-based data. The principles outlined by this initiative should be referenced in the formulation of building regulations for minimum energy performance requirements of heritage buildings.

ACCESS

As outlined in earlier parts of this report, access is regulated through various pieces of legislation and regulations as follows:

- a) Planning design guidance: DC15 (PA);
- b) Access for persons with disability: Access for All Design Guidelines (CRPD);
- c) Lifts: Lifts Regulations (MCCAA);
- d) Safety of Goods Lifts, Escalators & Travelators: Work Equipment (Minimum Safety and Health Requirements) Regulations (OHSA).

In addition to the above, external consultees in the planning application process, such as Transport Malta, also have an influence on the design of site access.

Regulatory fragmentation characterises the safeguarding of building

users' safety when accessing buildings and moving within them.

MEPA Circular 2/14 outlines exemptions from conformity with access requirements specified by the CRPD. It makes no specific reference to buildings of historic or architectonic value. Building regulations should support an inclusive and sustainable society, which allows for all its members to enjoy and participate in the social, economic and cultural assets of the nation. However, there may be instances when the architectural, cultural or heritage value of a building is such that physical interventions are not appropriate. In such cases, the already established Test of Reasonableness Board (TORB) may consider and recommend management solutions which do not necessitate alterations to the building, thus adopting a balanced approach.

ELECTRICITY

Electricity supply and installations in buildings are regulated by the Electricity Supply Regulations²¹ and Electrical Installations **Regulations**²² which falls under the remit of REWS. These regulations contain three peculiarities:

1.

They stipulate that Malta's technical design regulations are entirely based on the UK's Institute of Electrical Engineer's wiring regulations. The institute, which since 2006 was amalgamated into the Institution of Engineering & Technology, is the British institution tasked with publishing and updating the UK's national standard on electrical installations, BS 7671, together with the British Standards Institute (BSI). Through Malta's regulation, any changes in the British Standard are automatically adopted locally. It is pertinent to note, however, that BS 7671 follows the IEC 60364 very closely. Indeed, the IEC's standard is widely adopted across the European Union member states, with some variances in language and traditional practice. It would thus appear to be more appropriate for Malta to adopt the IEC standard directly and apply any local variances that may be necessary through an electrical code, rather than adopt the British Standard.

2.

Enemalta was identified in Malta's regulations as a regulator until 2016, a highly inappropriate situation considering it is a private company which should have itself been subject to regulations set out by a national regulator, particularly in view of its monopolistic market position. This has been rectified through the 2016 amendment to the legal notice, which established There exist no regulations in Malta about ensuring security within buildings from unauthorised access. Most European countries provide regulation to provide for adequate resistance from unauthorised access to dwellings, and flats within an apartment block. Building components that are regulated include:

REWS as the regulator. Nevertheless, Enemalta is still identified in the Development Planning Act as an external consultee in the planning application process, assessing proposed development in terms of regulation and internal company policy. In the Kamra's view, this is also highly inappropriate, not only because planning applications should not be burdened by building regulation matters, but also because as explained earlier it provides a private company, and its shareholders, with undue dominance

- Doors and windows;
- Locks;
- Letter plates;
- Hinges;
- Means of viewing outside front doors, such as door viewers, clear glass panels, intercoms, door chains, etc.

The only official document traced that deals with security is the PA's DC15. Guidance G22 of DC15 covers this purely from an urban design point of view, by providing for security through natural surveillance and the elimination of dead frontages. This is indeed a planning issue, which should continue to be governed by the Planning Authority.

ICT

L.N. 226 of 2016, the In-Building Physical Infrastructure (Access to Electronic Communication Services) Regulations, transposes European Directive 2014/61/EU into Maltese law. The objective of this directive is that of reducing the cost of deploying high-speed electronic communication networks (fibre optic, cable) by ensuring that all new buildings and those undergoing major renovation works since 2016

provide high-speed-ready physical infrastructure within such buildings for ICT companies to connect their services. This includes providing access points for each individual unit, or apartment, within the building.

These regulations fall under the remit of the BRO, which in 2018 carried out preliminary consultation discussions with the Kamra tal-Periti on how to implement, raise awareness, and enforce these regulations. These discussions never proceeded further.

Construction products are regulated through **L.N. 462 of 2011**, which transposes EU Regulation 305/2011 on construction product safety and marketability.

The EU Regulation established harmonisation across EU member states on the declaration of performance certification and CE marking of construction products by economic operators, including manufacturers, importers, distributors, owners and operators.

The declaration of performance must include:

- 1. the reference of the product-type for which the declaration of performance has been drawn up;
- the system or systems of assessment and verification of constancy of performance of the construction product, as set out in Annex V;
- 3. the reference number and date of issue of the harmonised standard or the European Technical Assessment which has been used for the assessment of each essential characteristic;
- 4. where applicable, the reference number of the Specific Technical Documentation used and the requirements with which the manufacturer claims the product complies;
- 5. the intended use or uses for the construction product, in accordance with the applicable harmonised technical specification;
- 6. the list of essential characteristics, as determined in the harmonised technical specification for the declared intended use or uses;

- 7. the performance of at least one of the essential characteristics of the construction product, relevant for the declared intended use or uses:
- 8. where applicable, the performance of the construction product, by levels or classes, or in a description, if necessary based on a calculation in relation to its essential characteristics determined in accordance with Article 3(3);
- 9. the performance of those essential characteristics of the construction product which are related to the intended use or uses, taking into consideration the provisions in relation to the intended use or uses where the manufacturer intends the product to be made available on the market:
- 10. for the listed essential characteristics for which no performance is declared, the letters 'NPD' (No Performance Determined);
- 11. when a European Technical Assessment has been issued for that product, the performance, by levels or classes, or in a description, of the construction product in relation to all essential characteristics contained in the corresponding European Technical Assessment.

Construction products or materials produced locally that are accompanied with such declarations and/or CE markings are extremely rare. These products include franka blockwork, prestressed concrete planks, structural timber and formwork, aluminium apertures, railings, and tiles. Moreover, it is not customary for suppliers and importers of European construction products to supply clients and/or periti with the required documentation to ensure compliance with European Construction Product Safety standards.

It is thus evident that L.N. 462 of 2011 was only transposed on paper but never enforced, undermining consumers and building occupants, and exposing periti and their consultants to undue liability.

The only construction product regulation that appears to be largely²³ observed is the Building Stone Order dating to 1976, which regulates the size of a masonry block: one size for Malta and another for Gozo. There is no mention, however, of minimum load bearing capacity; chemical, weathering, thermal, and fire resistance; texture and colour; porosity, and other important characteristics of construction products.

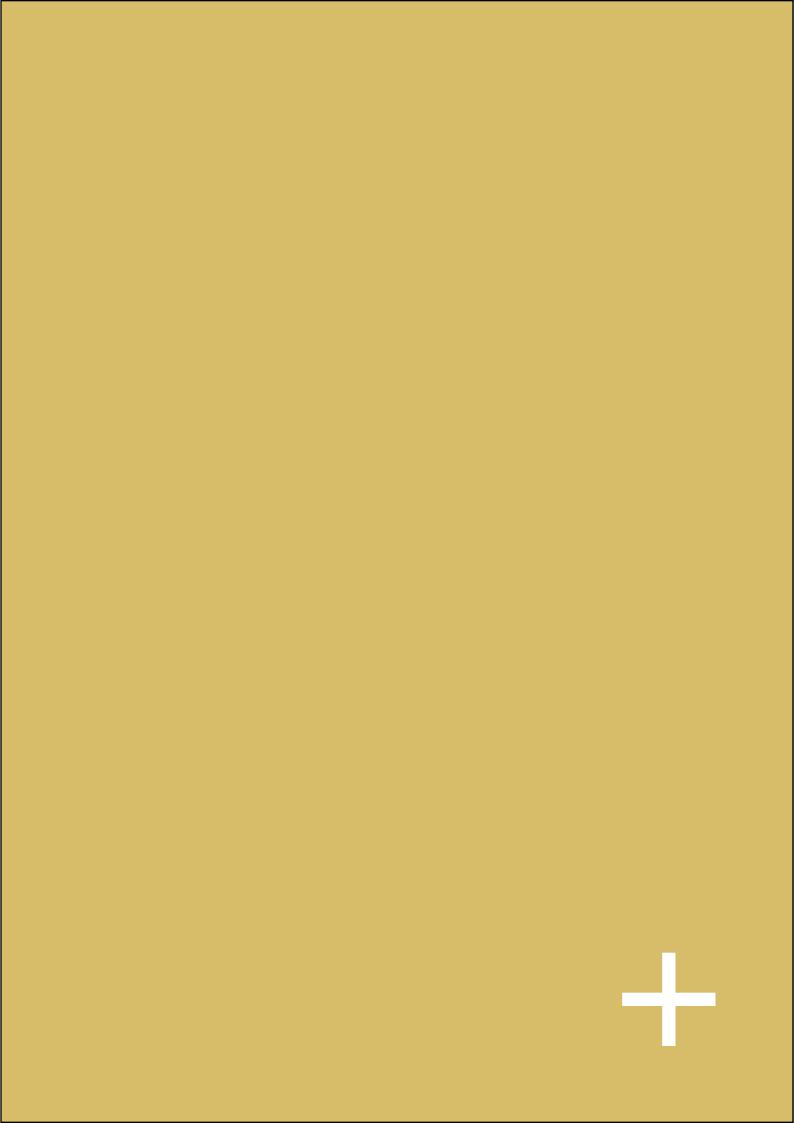
²³ The industry is producing additiona sizes of blockwork no contemplated in the regulations.

°4 °

The aforementioned European Technical Assessments generally also stipulate the workmanship that is required to ensure that the construction products and materials bearing a CE marking are utilised correctly to achieve the required performance. Most European building regulation frameworks thus also require that workmanship is certified by building contractors to have conformed with the required standards.

None of these processes exist in Malta yet. Moreover, the absence of registered contractors, and skill certifications allows for amateurs and unskilled labourers to offer services to consumers with often tragic consequences²⁴. This situation is compounded by the Courts' general presumption that the ultimate responsibility for certification and oversight rests exclusively with the perit in charge. Notwithstanding this, periti have the legal right to qualify their terms of engagement by a Services Contract, while the works themselves should be covered by a separate Works Constract which should include design drawings and specifications with which every building material or component should comply. It is here important to acknowledge that if a perit assumes responsibility for any work without having these two important tools in hand, then the conclusions of the Courts may, in actual fact, be inevitable. This situation is no longer tenable for the profession nor sustainable in the context of the ever-increasing complexity of the industry and must be addressed with urgency.

current construction regulation in malta



Fragmentation of construction regulation in Malta is less evident than that of building regulation. This is in part due to the fact there are serious lacunae and missing regulations, reducing the scope for multiplicity and overlaps. This chapter provides a brief oversight about the current state of construction regulation in Malta, characterised by incompleteness, lack of enforcement and training, inconsistency, and an absence of lines of responsibility.

PROCESSES

The processes governing construction works are outlined below.

PRE-CONSTRUCTION PHASE

There are several entities involved in the pre-construction phase.

The Development Planning (Procedure for Applications and their Determination) Regulations, 2016²⁵, state that "[p]rior to the commencement of any works relative to a valid permit, the perit must submit the relative commencement notice on behalf of the applicant to the [Planning Authority] within the period of five days in advance to the date of commencement of works or utilization of permission."

The PA provides a specific Commencement Notice form, wherein the *perit* is required to provide the details of the developer, site manager²⁶, and licensed mason²⁷. The Kamra tal-Periti had strongly objected to the process (Kamra tal-Periti, 2016b) for a number of reasons, including:

- The responsibility to submit the commencement notice according to the Development Planning Act rests with the applicant, not the perit;
- b) The notification of commencement of works is unrelated to planning, and should be administered exclusively by the BRO;
- c) If the PA requires any commencement notice at all, it should be submitted by the applicant solely for the purposes of notifying the PA that the permit is being utilised. All other construction-related matters are of no consequence to the PA.
- d) The commencement notice was touted as a one-stop shop process, but this was proven not to be the case since all the

legal obligations for prior notification to other entities was never repealed, thereby adding unnecessary bureaucracy to the process;

- e) There are significant inconsistencies among various pieces of legislation on the minimum prior notification of commencement. The PA's 5-day prior notice is, indeed, the shortest, and thus the one-stop-shop concept was not possible without reviewing all other legislation;
- f) Article 1638 places the onus of responsibility on the contractor, together with the *perit*, not the licensed mason. Moreover, there exists no register or categorisation of contractors;
- g) The *perit* should not be held responsible for the competence of the licensed mason. Moreover, it is the developer's responsibility to verify that the mason has a valid license in accordance with the Civil Code. This is now facilitated by the fact that the BRO had published a list of all licensed masons in June 2019 at the insistence of the Kamra tal-Periti.

The **Avoidance of Damage to Third Parties Regulations, 2019**²⁸, establish another pre-construction process that must be followed by developers prior to the commencement of all types of works affecting third parties:

- 1. The contractor shall appoint a Site Technical Officer (STO) to be selected from an approved list published on the BCA website. The BCA / BRO is to be notified of such an appointment, together with the submission of a declaration of acceptance signed by the STO. If the works do not require an STO, then the developer, through the perit in charge, may submit a request for exemption for the works to be carried out without appointing an STO.
- 2. The perit responsible for the project shall, on behalf of the developer, draw up detailed condition reports, with the minimum requirements being outlined in L.N. 136 of 2019, in particular the Seventh Schedule. In case of excavation, the same legal notice outlines which third party properties should be inspected
- The developer must ensure that adequate insurance cover amounting to €750,000 for "any single occurrence or recurrence of damages sustained by third parties, disability to persons or

²⁸ See L.N. 136 of 2019

death as a result of the construction works or activity being undertaken by the developer and the contractors working on site" during demolition, excavation and construction works is taken out. The developer is also required to carry out "adequate" risk assessments to verify whether the €750,000 minimum cover is sufficient to cover all third-parties and, if not, to increase the cover accordingly. Moreover, any excess on the insurance policy is to be covered by a bank guarantee.

- 4. When development works affect third-parties, the project *perit* is required to submit, on behalf of the developer, works method statements for the demolition, excavation and/or construction phases, not less than two weeks prior to the commencement of works. Regulations stipulate that the method statements are to be drawn up by a purposely appointed *perit* in collaboration with the contractor and his STO.
- 5. If the envisaged works include excavation, a geotechnical study and report of the site need to be prepared and submitted.
- 6. In line with the Second Schedule of L.N. 136 of 2019, a detailed and summary site responsibly form identifying the developer, contractor, project *perit*, STO, site manager, project supervisor, and *perit* responsible for the method statement/s, depending on the envisaged works, must also be submitted.
- 7. The developer is to notify the owners and/or tenants of adjacent properties with the method statements and relative condition reports, who may submit any objections on the method statements and/or condition reports within two weeks.
- 8. The third-party owners have up to 3 weeks to submit any objections on the method statement or condition report.

The Environmental Construction Site Management Regulations, 2007³⁰, which as explained in Chapter 1 are subsidiary to the Development Planning Act but fall under the remit of the BRO³¹, set out a separate preconstruction process:

 The developer is to submit, through the notification of commencement to the PA discussed above, details about the site manager falling under these regulations;

³⁰ See L.N. 136 of 2019 ³¹ See section 1.2.1.

34 See section 3.2.5

- 2. Three weeks prior to the commencement of any construction works expected to last longer than 4 weeks, the developer is required to affix a notice board providing the names and contact numbers of the owner, site manager, *perit*, and contractor/s;
- The site manager is responsible for ensuring that hoarding, barricades, safe passages and covered ways, in line with the regulations, are set up prior to the commencement of demolition, excavation or construction works;

The OHSA has yet another pre-construction process in place governing health and safety of workers on site. Indeed, L.N. 88 of 2018 establishes the following pre-construction procedures:

- 1. The developer is to appoint a project supervisor³² for the design and execution of the works;
- 2. The developer is responsible for ensuring that a health and safety plan³³ is drawn up prior to the commencement of works;
- 3. When the project size and duration exceed specific parameters in the regulations, the project supervisor is to notify the OHSA about the commencement of works at least 4 weeks in advance.

When works are to be carried out in heritage buildings or in archaeologically sensitive sites, a specific condition in the planning permit requires the developer to also notify the SCH prior to the commencement of any works. This may also involve the appointment of an independent archaeological monitor from a list of registered persons published on the SCH website.

CONSTRUCTION PHASE

Only a few disjointed and incoherent regulations govern the construction phase.

Firstly, **L.N. 72 of 2013** requires that the site manager³⁴ takes responsibility for the implementation of the method statement drawn up by the *perit*.

L.N. 136 of 2019 requires that the Site Technical Officer ensures that the methodologies described in the method statements are observed by the contractor during the course of the works.

The regulations also specify the details that need to be included in the method statement in the following cases:

- 1. Demolition works:
- 2. Excavation works, including the need for geological investigations;
- 3. Construction works affecting third parties; and
- 4. The setting up of cranes, and relative inspection certificates³⁵.

The main characteristic of these regulations is that, rather than the BRO establishing specific regulation on how demolition, excavation, construction and craneage works are to be undertaken, they pass its responsibility on to *periti* who are compelled to establish such methodology and carry professional and personal responsibility for it. To compound matters, the BRO is yet to regulate contractors as it is legally obliged to do. The failure to train and license contractors has resulted in a regulatory vacuum that makes it almost impossible for the BRO to enforce demolition, excavation or construction regulation on contractors. This may explain why *periti* are used to fill this lacuna.

The site manager appointed by virtue of L.N. 295 of 2007 is responsible for ensuring that the Environmental Construction Site Management Regulations are implemented. The regulations include subjects such as:

- Cutting of stones and bricks;
- Transportation and deposit of loose building material;
- Obstruction to pedestrian and vehicular traffic;
- Site cleanliness;
- Rodent control;
- Operating hours;
- Moratorium of construction works in tourist areas;
- Dust emissions, sanding, and fair facing of stone;
- Noise abatement;

³⁵ No detail on what the certificates should cove is provided.

- Health and hygiene on site;
- Disposal of waste;
- Prevention of contamination of the site and neighbouring properties through hazardous material;
- Prevention of contamination or damage caused to road infrastructure by storm water flowing through or out of the construction site.

It is pertinent to highlight a deficiency in one of the items in the above list, which is characteristic of the inadequacy of the regulations. On noise abatement, for example, the regulation is silent on the maximum noise levels that can be emitted from a construction site. It only specifies that the maximum noise levels between 2pm and 4pm must not exceed 65dB. It is unclear why these specific hours are identified as meriting such specific noise abatement, while it is effectively a free-for-all at all other hours.

When works require partial or complete temporary road closures, developers and/or contractors are legally required through L.N. 119 of 2002 to pay "for the services of a community officer to control the traffic". Community officers, or wardens, are, however, not always available and frequently replaced by police officers or Transport Malta officials.

The Kamra tal-Periti is unaware of any instances where wardens, police officers or Transport Malta officials assigned to control traffic have ever intervened when other construction site regulations, such as the generation of excessive dust or noise, were breached, or unsafe construction practices witnessed.

Project supervisors, commonly referred to as health and safety inspectors, are responsible for regularly monitoring construction sites to ensure compliance with the health and safety plan, and specific provisions of the health and safety regulations.



L.N. 136 of 2019 states that on completion of works "[t]he developer shall, within two (2) weeks, submit a certification issued by the perit in charge of the project that the works have been completed." Completion is defined as "the completion of all structural and other works including the roof screed of roofs, terraces and yards, the closure of apertures (sic) and other works to render the building sealed against the ingress of water".

This is a very narrow definition of completion, in that it only covers civil works but not other works that may still cause damage to third-party properties, or even damage to the structure under construction. Moreover, the certification does not cover quality, but is a mere statement about the conclusion of the construction operation.

On receipt of such completion certificate, with the coming into force of L.N. 136 of 2019, the BRO shall no longer notify the owners of the contiguous properties about their right to file a request for compensation caused by the works within 3 months. Instead, this obligation has been passed on to the project perit. The Kamra tal-Periti contends that this obligation should lie with the developer, who should also be obliged to notify the BRO of such notification.

The PA has a separate process governing the completion of projects, that in some cases triggers other public entities in reviewing compliance. Development permits are issued subject to a number of conditions. These conditions normally include compliance with specific requirements made by external stakeholders during the processing of development permit applications, and may include CPD, CRPD, SEO, EHD and SCH, depending on the nature of the project.

This process culminates with the issue of a Compliance Certificate by the PA, based on a declaration submitted by the perit in charge of the project, which is used either to confirm compliance of development prior to occupation, or as a mandatory requirement when applying for utility meters. The PA's external consultees that may be involved in these processes, and respective circumstances are illustrated in Table 1.

The main deficiencies with this process are that:

- 1. The process is disjointed, fragmented and cumbersome;
- Tying in building regulation conditions in a planning permit creates legal grey areas in the case of non-compliance since the PA has no jurisdiction in matters not regulated by the Development Planning Act;
- 3. Once a Compliance Certificate is issued there is no system in place for post-occupancy verification and certification.

POST-OCCUPANCY PHASE

Post-occupation regulations in Malta are very limited. The most widely known and established system is that governing lifts. The Inspection of Lifts Regulations³⁶ provide a very detailed and comprehensive process which ensures the safety of users of lifts, and the long-term durability of the machinery itself.

The Electrical Installation Regulations³⁷ provide REWS with regulatory powers to request inspections of installations, particularly when malpractice is suspected.

³⁶ See L.N. 231 of 2007

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3 2 1

This section outlines the roles of the professions and trades within the construction industry currently recognised at law.

PERITI

The Laws of Malta reserve certain professional activities, related to the construction industry, to persons who hold a warrant of *perit*, awarded by the State for this purpose. These activities are reserved to warranted professionals generally because of the need to protect the public interest, particularly in relation to issues of public health and safety, such as the structural integrity of buildings and structures, and public sanitation issues, but also the protection of the urban environment and of cultural heritage. *Periti* owe a duty of care towards their client, but also towards society and the environment in general.

Article 1638 of the Civil Code of the Laws of Malta, for example, establishes that should a building or "a considerable stonework perish, wholly or in part, or be in manifest danger of falling to ruin", the *perit* and the contractor are held jointly responsible. This responsibility covers events that occur within fifteen years after the date of completion, and even includes situations that arise from "defects in the ground". The *perit* is generally responsible for the design and for the inspection of the construction of buildings and works, and the contractor for the execution of the works; however, it would be up to the Courts to decide on the relative attribution of blame.

Articles 1031-1033 of the Civil Code, in addition, also establish personal liability for any damage caused through negligence, imprudence or lack of the appropriate attention to the tasks commissioned, on the basis of tort.

These liabilities could, therefore, only be carried by a "natural" person, that is, by the *perit*, on a personal basis. Article 10 of the Periti Act (Chap.390 of the Laws of Malta) provides, however, for the possibility that a professional partnership be set up, through a private agreement, so that two or more professionals agree to assume joint and several liability, for any loss or damage occurring as a result of the action of each professional partner. This means that the professional partnership assumes the responsibility for the action conducted by any of the partners, in the name of the partnership.

The Code of Police Laws places the onus³⁸ on the *perit* to ensure, inter alia, the provision of proper damp proof courses in the construction,

38 Articles 97 & 100

the provision of sanitary facilities, and proper connection to the public sewers.

The Development Planning Act requires the submission of an application for development permission to be submitted by a *perit* on behalf of the client. Other pieces of legislation, for example, require that the valuation of immovable properties, fair rents and agricultural leases be carried out by a *perit*. The Cultural Heritage Act requires that interventions on heritage buildings can only be carried out by *periti* who have specialist conservation and restoration skills. The Building Regulation Act requires that a *perit* certify that the construction of a building has been carried in conformity with the Building Regulations, even though virtually no such regulations are yet in place.

The Kamra tal-Periti was set up in 1920 to embody the entire professional body of *periti*. The Periti Act and the Chamber of Architects Regulations³⁹ set out the following main functions of the Kamra:

- 1. To ensure the well-being and the progress of the profession of architects and civil engineers in Malta;
- To correspond with Government and vice-versa on all matters concerning the profession, as well as other subjects of public interest;
- 3. To enforce the observance of the Code of Professional Conduct⁴⁰ by all *periti*;
- 4. To enquire into the professional practices of architects and civil engineers which are considered inconsistent with the dignity of their profession, and into abuses or failures imputed to them in the exercise of their profession or in connection with professional affairs:
- To meet the obligations and fulfil the powers, functions and responsibilities attributed to a competent authority in terms of the Services (Internal Market) Act, in particular in the case where non-established architects and civil engineers pose a threat to public safety.
- 6. Discussions between the Kamra tal-Periti and Government have been ongoing since 2007 to update the Periti Act with the purpose of modernising the profession further and aligning it

39 See G.N. 202 of 1920

40 See First Schedule o

with the Services Directive and the Professional Qualifications Directive. In August 2019, Government committed itself to Ipresent the Act for Parliamentary approval by October 2019. To date, the profession is still awaiting the fulfilment of this commitment.

ENGINEERS

The **Engineering Act** defines the eligibility for the warrant as well as the duties and obligations pertaining to a warrant holder. The engineering profession is structured slightly differently from that of *periti*, particularly in the case of professional conduct, which is handled by the Engineering Board not the Chamber of Engineers (Chamber of Engineers, 2017).

Engineers have a critical role in the construction of buildings, particularly in relation to electrical installations, mechanical ventilation systems, lifts and other mechanical plant, and are important collaborators of *periti*. It is pertinent to point out that Civil Engineers are granted a warrant under the Periti Act. All other engineers, subject to minimum qualification criteria as set out in the Engineering Act and the review of applications by the Engineering Board, are eligible for the warrant of an engineer.

Recent proposals for amendments to the Engineering Act may upset the practices and processes prevailing to date, and it is hoped that the Chamber of Engineers resists any attempts to undermine the profession, particularly in view of the important role they play in ensuring the safety of occupants of buildings.

SITE TECHNICAL OFFICERS

This new role was introduced by L.N. 136 of 2019, and required the contractor to engage an STO. This role was created to fulfil three primary tasks:

- Collaborate with the contractor (the STO's employer), and the perit in charge, in drawing up the method statements;
- Enforce the method statement/s on the STO's employer (i.e. the contractor); and
- To be present on site when decisions are being made. It is unclear what types of decisions the regulations refer to, or whose decisions they refer to.

The Kamra tal-Periti has consistently contended that the STO role makes construction sites more dangerous as it confuses lines of responsibility and transfers a significant portion of the contractor's liability onto the STO. There is also the risk that this role may be perceived as one which takes over the responsibility for site inspections from the project *perit*. Of even greater risk is that this confusion may increasingly give rise to a laissez-faire attitude by all parties on site as they hide behind the regulatory confusion.

Finally, the STO's conflict of interest arising from the dependence on remuneration from the contractor, while concurrently having the role of reporting the same employer to the BRO in case of any breach, while carrying personal responsibility for failing to do so, makes this a Kafkaesque role par excellence.

It is pertinent to point out that the minimum qualifications for someone to be registered as an STO by the BRO is to either hold a warrant to practise as a *perit*, or to be a graduate in engineering. This gives rise to two unresolved questions:

- All periti are graduates in engineering, except that they are also warrant holders - it is unclear what the function of the warrant of perit is in this context, when being a graduate in engineering is sufficient to satisfy the requirements of the legal notice;
- Given that graduates in engineering, such as computer or electrical engineering can also perform this role, it is unclear what safeguards this role brings to public safety - indeed, the Kamra tal-Periti contends that this situation further endangers the safety of affected third parties, and of the site itself.

SITE MANAGERS

The site manager required to be appointed in terms of the Environmental Management Construction Site Regulations is defined as "a person carrying out the duty or duties derived from the provisions of these regulations. Such person shall be nominated by, and responsible on behalf of, the owner for ensuring the correct implementation of these regulations".



The regulations state that a site manager may be either "the owner himself, the project supervisor [under the health & safety regulations, a perit, or any other competent person", whatever that means. Regulation 9(c) states that the Minister may issue specific regulations to create a register of site managers, including the establishment of minimum qualifications, a code of conduct and a continuous professional development programme. In the eleven years that these regulations have been in place, however, no such register was ever created.

It is pertinent to point out that, despite their great responsibility, there exist no minimum qualifications for site managers. Indeed, site managers may very well be unable to understand construction drawings or even have sufficient literacy skills to read and understand the regulations or the works method statement they are responsible for enforcing.

Such is the inadequacy of Malta's construction regulation.

PROJECT SUPERVISORS

L.N. 88 of 2018 defines a project supervisor as "[a]ny natural or legal person responsible for health and safety supervision or a project, appointed by a client". Regulation 5 sets out the duties of a project supervisor:

- 1. Take account of the general principles of prevention concerning health and safety referred to in the Act and subsidiary regulations as appropriate, during the various stages of designing and preparing the project, in particular:
 - when architectural, technical and/or organisational aspects are being decided, in order to plan the various items or stages of work which are to take place simultaneously or in succession;
 - ii. when estimating the period required for completing such work or work stages.
- 2. Co-ordinate the implementation of the provisions of this regulation, and draw up a health and safety plan prior to the setting up of a construction site;
- 3. Prepare a file appropriate to the characteristics of the project containing relevant health and safety information to be taken into account during any subsequent works;

- 4. Coordinate the implementation of the general principles of prevention and safety:
 - when technical and, or organisational aspects are being decided, in order to plan the various items or stages of work which are to take place simultaneously or in succession:
 - ii. when estimating the period required for completing such work or work stages;
- 5. Coordinate the implementation of the relevant provisions of these regulations in order to ensure that employers and, if necessary, for the protection of workers, self-employed persons:
 - i. apply the principles referred to in regulation 9 in a consistent manner;
 - ii. where required, follow the health and safety plan referred to in sub-regulation (4) of regulation 5;
- 6. Make, or cause to be made, any adjustments required to the health and safety plan referred to in sub-regulation (4) of regulation 5 and the file referred to in sub-regulation (4) of regulation take account of the progress of the work and any changes which have occurred;
- organise cooperation between contractors, including successive contractors on the same site, coordination of their activities with a view to protecting workers and preventing accidents and occupational health hazards and reciprocal information as provided for in regulation 7 of the General Provisions for Health and Safety at Work Places Regulations, ensuring that self-employed persons are brought into this process where necessary;
- 8. Coordinate arrangements to check that the working procedures are being implemented correctly;
- 9. Take the steps necessary to ensure that only authorised persons are allowed onto the construction site.



Project managers are key figures in modern construction sites, particularly in larger, more complex developments. Their role is to coordinate the works and the inputs from the various *periti*, engineers and other professionals involved in the design and implementation phases, and to control costs and time delivery. A high degree of skill and technical knowledge is required for them to adequately fulfil their role.

The Kamra tal-Periti is not advocating that project managers should become a regulated profession. It is indeed unlikely that the European Commission would allow for the regulation of this or other professions due to the Services Directive. Nevertheless, it is essential that the role of project managers be better regulated through service agreements signed with developers, and that specific skill card courses be provided to ensure they can contribute to ensuring good site behaviour.

CONTRACTORS

Article 1638 of the Civil Code states that "[i]f a building or other considerable stone work erected under a building contract shall, in the course of fifteen years from the day on which the construction of the same was completed, wholly or in part, or be in manifest danger of falling to ruin, owing to a defect in the construction, or even owing to some defect in the ground, the architect and the contractor shall be responsible therefor."

This article in the Civil Code does not establish clear lines of responsibility, which are generally decided by the Courts when incidents occur, depending on the particular circumstances of each case. Moreover, whereas *periti* carry a professional warrant and are subject to a Code of Professional Conduct, contractors are not regulated at all. This is especially worrying when it comes to demolition and excavation contractors. The absence of a registration system means that anyone with demolition or excavation plant can carry out such works, without any basic training, technical knowledge, or insurance cover.

The new regulations which came into force in July 2019, rather than addressing these problems, have made the situation worse by creating the role of STO which takes on a good part of the responsibilities hitherto carried by contractors in terms of the Civil Code.

The only two trades that are currently regulated in Malta are masons and electricians.

The Kamra tal-Periti actively participated and supported the BRO's efforts to draft regulations for the registration of contractors in 2018 and 2019 through the BICC's Building Regulation Working Group. The draft regulations intended classifying contractors by type of activity and economic capacity. There were also proposals for the introduction of compulsory insurance and minimum standards. To date, however, these have not been promulgated.

The Kamra viewed this development favourably, however, was doubtful about its efficacy in the context of the virtually complete absence of building and construction regulation. The Kamra's position on the draft regulations that were being discussed was that the registration of contractors must be seen as part of a more holistic reform that includes the introduction and consolidation of building and construction regulations. Contractors who wish to register under one of the trades, say demolition works, would first need to undertake courses covering the relevant building and construction regulations. Until the regulations are in place, no such courses can be provided, rendering the exercise of registering contractors meaningless.

The Kamra tal-Periti was greatly disappointed when, on the 22nd May 2019, these consultations were brought to an abrupt halt by the MDA when it disclosed an agreement it had reached with Government to take over the process. The Kamra will never agree to the privatisation of licensing of contractors.

MASONS

Article 95 of the Code of Police Laws states that:

- "95. (1) It shall not be lawful to exercise the trade of mason without a licence from the Director of Public Works.
- (2) Such licence shall not be granted except to persons of good conduct who shall have proved their skill in an examination to be conducted by the Masons Board constituted under article 96."

Moreover, the **Building Regulation Act** states that:

"5. (1) The Building Regulation Office shall be the entity responsible to issue licences for masons, and to register fire consultants, other consultants in the building industry, building contractors and building tradespersons.

CURRENT CONSTRUCTION REGULATION IN MALTA (5) The Director, Building Regulation Office, shall keep a register or registers of masons, building contractors and building tradespersons according to the categories or subcategories established in sub-article (4)."

For many years, the Kamra tal-Periti insisted for the publication of the list of licensed masons. Various requests were made to the Masons' Board over the years. Each was dismissed on the grounds that publishing the list of licensed masons would breach data protection regulations. This preposterous justification was not supported by the law since there is a clear public safety interest for publishing such a list which overrides any privacy considerations.

The impacts of this situation on the industry were serious, and the potential consequences numerous. By way of illustration, reference is made to the Court sentence in the case Marianna Cini pro et noe v. Paolo Galea et of the 27 October 1958, which declared that it is the *perit*'s duty to ensure that any masons working under his or her direction are licenced ("huwa dmiru li jara li I-bennejja li jkunu se jaħdmu taħtu jkunu liċenzjati ..."). This principle has been cited in subsequent decisions. The question automatically arises as to how a perit was meant to verify that a person does in fact hold a valid licence when there was no register which was publically available.

Finally, following persistent requests by the Kamra tal-Periti, the list of licensed masons was published. This, as stated earlier, ironically took place during an Extraordinary General Meeting of the Kamra held in June 2019, wherein the profession debated this unacceptable situation, and passed a motion entreating Government to publish such list immediately.

Another issue related to the commencement notice required to be submitted to the Planning Authority, which is to be signed by the "licenced builder". *Periti* were required to declare that the "licenced builder ... signed this Commencement Notice in my presence...". The Kamra repeatedly asked the Planning Authority to remove this part of the declaration from the form, firstly because it is impractical and pointless, and secondly and more importantly because making this declaration may be interpreted as meaning that the *perit* had in fact verified that the person signing the form is a "licenced builder" (or mason), particularly by the Courts. In August 2019, these requests were acceded to.

ELECTRICIANS

Regulation 5 of the Electrical Installations Regulations⁴¹ sets out two levels of authorisation for electrical installations:

neighbouring properties, and the general public to serious risks.

Authorisation A for the installation, alteration, extension and certification of single-phase electrical installations; and

It is pertinent to conclude this section with a note that the role of the mason as at present raises several parallel and equally pressing concerns, including that they are not adequately trained in contemporary building technologies, materials, and practices. They expose themselves,

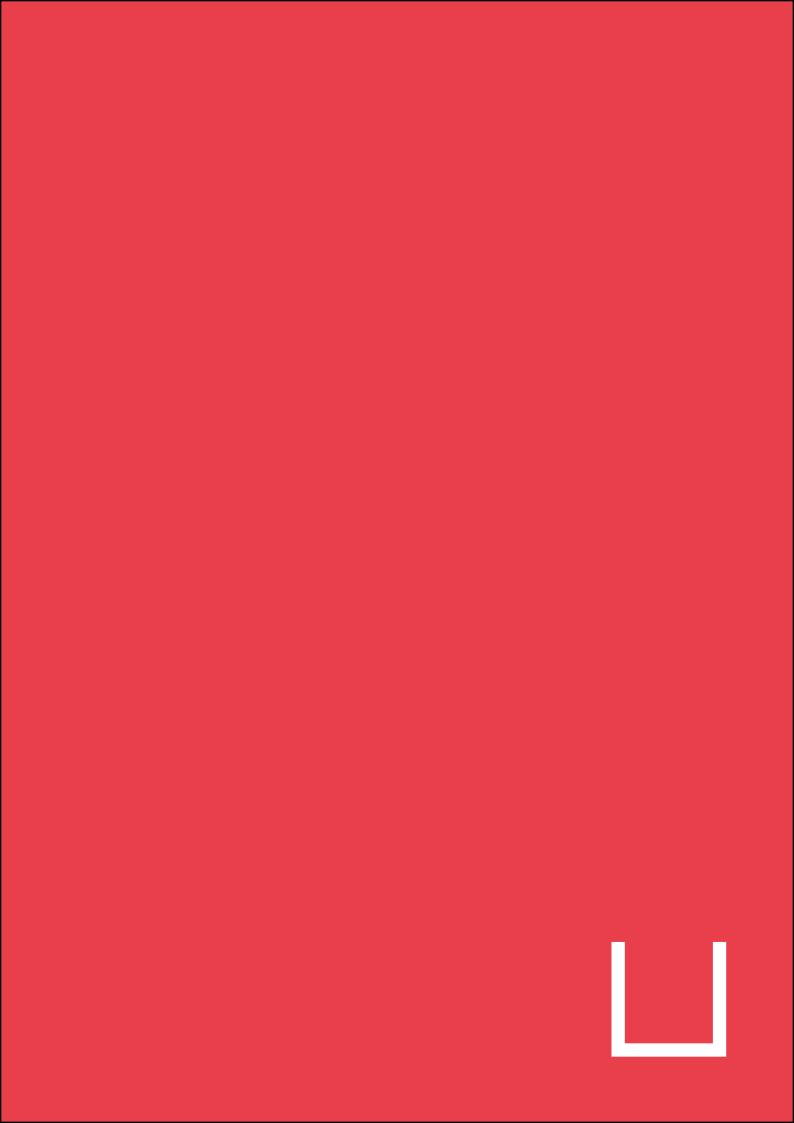
- a) Authorisation B for installation, alteration, extension and certification of single-phase electrical installations and threephase electrical installations rated up to 300Amps per phase.
- b) The holder of an authorisation B may also carry out installation, alteration, extension and certification work on three-phase electrical installations rated more than 300Amps per phase but may not certify such electrical installations

The regulation also establishes minimum requirements, including specific courses, examinations and licence regime administered by REWS, for electrical engineers and electricians to be able to apply for the two levels of authorisations. Warranted electrical engineers only are authorised to design and certify installations rated above 300Amps⁴².

GENERAL OBSERVATIONS

Despite L.N. 136 of 2019, construction sites, are generally characterised by poor oversight, discipline and professionalism leading, all too frequently to loss of life, injury, accidents, and environmental degradation. The rushed regulations that were brought into force in July 2019 only served to add confusion to sites. There is a general sense of lawlessness where neither the public nor the private sectors shoulder any responsibility for the current state of affairs. The Kamra tal-Periti strongly believes that this situation needs to be urgently addressed and is putting forward its proposals in the final chapter of this document.

case studies of foreign frameworks



This chapter delves into the structure of regulatory bodies and frameworks in other European countries providing insight on international best practice.

BUILDING REGULATION IN EUROPE REGULATORY FRAMEWORK

In most European countries, building regulation is governed by a Building Act. There are some exceptions such as Austria, where there is no central building regulatory law, and Belgium, France and Portugal where technical building regulations are not regulated by a central act. Countries such as Bulgaria, Czech Republic, Finland, Germany and Sweden have combined Building and Planning Acts (Pedro, et al., 2010).

REGULATORY RESPONSIBILITY

The responsibility to establish technical building regulations normally rests with central authorities. In some countries, additional regulations are provided by local or regional authorities to cater for specific climatic or cultural specificities (Pedro, et al., 2010).

ORGANISATION

In most European countries, technical regulations are implemented through a Building Act that details the minimum requirements for health, safety, energy efficiency and others (Meijer & Visscher, 2007). In such cases, technical requirements are generally supported through official documents that regulate best practice standards, approved solutions and administrative procedures (Meijer & Visscher, 2007).

Pedro et al. (2011) identified three main types of frameworks for technical building regulations in European countries:

- Technical building regulations specified in one main document with sub-regulations complementing particular subjects;
- Technical building regulations organised in a coordinated set of documents;
- Technical building regulations contained in separate legal documents.

Pedro et al. (2011) classify the typology of technical building regulations in three main categories:

- Functional the main objectives are defined by the requirements, whereas determination methods of performance levels and reference to solutions or materials are not defined:
- Performance the performance level is expressed in quantitative terms and determination methods are defined;
- Prescriptive specific designs or construction solutions are specified by regulations.

In general, the formulation of requirements is performance-based, in combination with functional or prescriptive requirements (Pedro, Meijer and Visscher, 2010). A synopsis of typologies adopted in European countries is presented below, as outlined by Pedro et al. (2011):

- Czech Republic, Denmark, Germany, Finland, Ireland, The Netherlands, Romania, Spain and Sweden: Performance-based approach, combined with some prescriptive requirements).
- Austria, Belgium, Bulgaria, France, Italy, Latvia and Portugal, Cyprus, Luxembourg and Malta: Prescriptive approach, but new technical building regulations are generally based on a performance-based approach.
- Spain, Czech Republic, France, Slovakia, Slovenia, England and Walesl: Regulations include official documents which provide guidance to the technical building regulations. and deemed-tosatisfy solutions to comply with the requirements. The solutions contained in these documents are for guidance only and there is no obligation to adopt them, as there may be other alternatives to achieve compliance.
- Denmark, Finland and Sweden: Building regulations include mandatory performance requirements and non-mandatory guidelines with more detailed information for their implementation.

Specific technical building regulations for existing buildings are not common in European Member States. In the countries where they do exist, they normally apply to specific situations (Pedro, et al., 2011).

Pedro, Meijer and Visscher (2010) have identified two main approaches for construction works in existing buildings:

- All construction works are regulated by general building regulations but there are some exceptions or less restrictive provisions for existing buildings (e.g. Austria, Cyprus, France, Latvia and The Netherlands);
- All new buildings, reconstruction, extensions or change in use of existing buildings are regulated by general building regulations (e.g. Ireland, Portugal, Slovenia, England and Wales).

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BUILDING PERMIT PROCEDURES

TYPES OF PROCEDURES

According to Pedro, Meijer and Visscher (2011) building permit procedures can be illustrated as per Table 2.

BUILDING PERMIT PROCEDURES IN EUROPE (PEDRO, ET AL., 2011)

REGULAR PROCEDURE	Construction works requiring a building permit and compliance with building regulations for all the technical requirements		
LIGHT PROCEDURE	Construction works that require a building permit and compliance with only part of the technical requirements of the building regulations		
BUILDING NOTICE	Construction works requiring a building permit and compliance with building regulations for all the technical requirements		
EXEMPTIONS	Construction works requiring a building permit and compliance with building regulations for all the technical requirements		

Table 3 illustrates different procedures for construction work categories.

CATEGORIES OF CONSTRUCTION WORKS FOR DIFFERENT PROCEDURES (MEIJER & VISSCHER, 2007)

	EXEMPTIONS	LIGHT PROCEDURE	FULL PROCEDURE	
BELGIUM	yes, listed	urban planning permit: simple file	urban planning permit: extensive file	
DENMARK	yes, listed	notification system	two types of building permit: small dwellings and other buildings	
ENGLAND & WALES	yes, listed	building notice (newly built houses and alterations)	full plans	
FRANCE	yes, listed	building notice	building permit	
GERMANY	yes, listed	simple permit	building permit	
NETHER- LANDS	yes, listed	light permit	regular permit	
NORWAY	yes, listed	building notice	general and start permit	
SWEDEN	yes, listed	building notice	building permit	

MAIN FEATURES OF THE BUILDING PERMIT PROCEDURE (MEIJER& VISSCHER, 2007)

	PRE- CONSULTATION	INSPECTION OF DESIGN	START BUILDING	INSPECTION DURING CONSTRUCTION	COMPLETION
BELGIUM	voluntary	yes	after permit is granted	by private inspection bodies	no
DENMARK	voluntary	structural work	after permit is granted	sample checks	approval for use
ENGLAND & WALES	voluntary	structural work / type approval	after permit is granted	regular inspection points, obligatory notice	completion certificate
FRANCE	voluntary	no	after permit is granted	no	completion certificate
GERMANY	voluntary	structural work / type approval	after permit is granted	inspection of structural work	approval for use
NETHER- LANDS	voluntary	structural work	after permit is granted	regular inspection points	No
NORWAY	obligatory	inspection plans	within 4 weeks of detailed plans	supervision of inspection plan	completion certificate
SWEDEN	obligatory	inspection plans	3 weeks after notice	supervision of inspection plan	completion certificate



Pre-consultation is voluntary in almost every European country and is regulated by law. During pre-consultation, any planning or technical requirements, as well as the tasks and responsibilities of the parties involved, may be discussed and clarified (Pedro, et al., 2011).

In some countries, the local authorities may be bound by agreements or consultation replies provided (e.g. Belgium Cyprus, Hungary, Italy, Latvia, Portugal and Sweden).

PLANNING PERMIT PROCEDURE

Depending on the regulatory framework present in each EU Member State, permit procedures for development control (planning regulations) and building control (building regulations) can be distinct or combined (Pedro, et al., 2011). Development control is focused on the issuance or otherwise of a planning permit, whereas building control is focused on the issuance or otherwise of a building permit.

Where the permit procedures (planning and building) are distinct, the issuance of a planning permit does not automatically guarantee the issuance of a building permit, and nor does it authorise commencement of construction works (Pedro, et al., 2011).

PHASING

In some countries it is possible to phase the building permit procedure, and is generally subdivided into three stages (Pedro, et al., 2011):

- Preliminary Design;
- Technical Design; and
- Construction Drawings.

In other countries, the building permit procedure is not formally phased as above, however, the sequential processes of planning permits, voluntary pre-consultation and building permits constitute an informally phased process (Pedro, et al., 2011).

In all European countries, except Malta, where the concept of building permits does not yet exist, statutory submission requirements are specified, and must be met as part of the assessment of the building design and prior to the issuance of the building permit (Pedro, et al., 2011).

PLAN APPROVAL

In most European countries, the extent of the technical requirement checks depends on building complexity and use. In France, for example, only the technical requirements for fire safety and accessibility are checked; whilst in Portugal, only spatial requirements are assessed, and all designers are required to submit a liability declaration to attest compliance with relevant building regulations (Pedro, et al., 2011).

During the plan approval phase, objections may be raised to a building permit being granted. Building permits generally allow for additional measures or minor changes to be done before or during the construction phase (Pedro, et al., 2011).

COMMENCEMENT OF CONSTRUCTION WORKS

Construction works can normally only begin after the building permit is granted and the building authority is notified of the intention to commence works. There are some exceptions (e.g. Bulgaria, Denmark, Italy, Latvia, Portugal and Finland) where the construction works can start earlier, however it is limited to special authorisations, partial building permits or early construction works such as demolition and excavation or peripheral earth retaining structures (Pedro, et al., 2011).

In all European countries, building permits normally include commencement and completion dates. If works are not completed within the allotted construction period, a fresh permit or an extension request must be submitted (Pedro, et al., 2011).

SITE INSPECTIONS

Site inspections during construction works are generally carried out by public or private building inspectors, or a combination of both.

In some EU Member States, building surveyors and designers perform inspections during specific phases of the construction works according

to a plan of works pre-agreed with the developer. In other countries, random site inspections are carried out by the building authorities (Pedro, et al., 2011).

A logbook recording the daily progress of construction works is normally legally required on site and made available to public building inspectors during the random site visits (Pedro, et al., 2011).

There are two main types of processes governing the completion of construction works (Pedro, et al., 2011):

- Building Authorities perform a final site inspection to verify compliance with the building regulations, approved building design and permit, or;
- Building Authorities do not perform the final inspection and rely on declarations by the private entities that were assigned to follow or inspect the building works (e.g. Austria, Denmark, Ireland, Portugal, Slovenia and Sweden).

In France, only buildings open to the public and high-rise buildings require a final site inspection by the Authorities.

In England and Wales, the applicant can request a copy of the completion certificate from the local Authorities, whether the works are supervised by local authority building inspectors or approved private inspectors responsible for certifying final compliance of the works.

The most important aspect of this process is that when construction works are completed, a building can only be put into use when the mandatory completion certificate or use permit is issued (Pedro, et al., 2011).

BUILDING CONTROL

QUALITY CONTROL

There has been a tendency for governments across Europe to simplify building permit procedures and outsource quality control processes to private entities in order to reduce the burden of building regulation on the industry (Meijer & Visscher, 2017).

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Private parties are normally responsible for supervising the implementation of the technical requirements (building control), while planning control remains the responsibility of the local authorities (Meijer & Visscher, 2017).

QUALITY CONTROL PROCEDURES

Full quality control procedures are normally only applied in the case of more complex buildings. Some types of construction work only require prior notification to the building control authorities, and full quality control is not required. Minorconstruction works, with no risks and no planning or safety issues, are normally exempt (Meijer & Visscher, 2017).

Table 5 summarises the building control procedures according to the different construction categories in seven European countries.

QUALITY CONTROL PROCEDURES IN SEVEN EUROPEAN COUNTRIES (MEIJER & VISSCHER, 2017)

CONSTRUCTION WORKS

ENGLAND	exemption	building notice	regular procedure
FRANCE	exemption	preliminary declaration	regular permit
GERMANY	exemption	simple procedure	regular permit
IRELAND			
NETHER- LANDS	exemption	only planning control	regular permit
NORWAY		application & consent	
SWEDEN			

The main characteristics of the quality control procedures for constructions in the seven European countries studied by Meijer and Visscher (2017) are shown in Table 6, which summarises the different phases of the construction process, from design and building permit application to construction and up to completion phase. In practice, the full quality control procedures illustrated in the table are only implemented in a minority of construction projects.

MAIN CHARACTERISTICS OF QUALITY CONTROL PROCEDURES IN SEVEN EUROPEAN COUNTRIES (MEIJER & VISSCHER, 2017)

	DESIGN	APPLICATION	CON	STRUCTION	COMPLETIC	DN
ENGLAND	P		authority ng control	Statutory	End	Completion Certificate
LITGLAND	Арр	approv	ed inspecto	Inspections	Inspection	Final Notice
FRANCE			certified private control bureau	Inspections conform plan	End Inspection & report	Completion Certificate
GERMANY	architect / engineer	Plan	Municpalit	Statutory	End Inspection	Completion
-	recognised expert	Approval		Inspections	gnised expert	Certificate
IRELAND	architect / engineer	Plan Approval, design certificate & inspection plan	assigi certifi		End Inspection & report	Completion Certificate
		pr	ivate contro	ller		Declaration
NETHER- LANDS	Plan App	roval, site inspec	tions via st	atutory recognised	d quality method	that construction as built complies
NORWAY	recognised designer	Plan Approval, & inspection plan	recognised supervisor	Inspections conform plan	gnised ler End Inspection & report	Completion Certifcate & User / mainte- nance manual
SWEDEN		Plan Approval, technical meeting & inspection plan	private controller	Inspections conform plan	End Inspection meeting & report	Final Approval

Meijer and Visscher (2017) observed that although there are some variations with regard to public and private control, private controllers generally have a significant role in quality control processes in most European countries. Research has also shown a trend towards transferring local building control to private parties.

Notwithstanding minor variances in the detail of the legislation, every European country (except Malta) has a system in place for inspection of works and the issuance of a completion certificate or approval on completion of the project. The completion certificate is normally issued by the local building authority after a declaration of compliance by the quality controller, or directly by the quality controller (Meijer & Visscher, 2017).

CHARACTERISTICS OF QUALITY CONTROL PROCEDURES

It is a universal requirement in all countries that private controllers must have certification, recognition or approval and be registered and controlled by their respective supervising bodies (Meijer & Visscher, 2017).

The three types of supervising bodies identified in various countries (Table 7) are the following (Meijer & Visscher, 2017):

- Professional organisations or bodies (England, Ireland and Germany);
- National Accreditation Organisations (France and Sweden);
- Governmental organisations (Norway and The Netherlands).

SUPERVISING BODIES OF PRIVATE CONTROLLERS (MEIJER & VISSCHER, 2017)

ENGLAND	approved inspectors	accreditation and supervision by construction industry council
FRANCE	private control bureaus	certification and supervision by national accreditation body COFRAC
GERMANY	architects, engineers and recognised experts	registration and supervision by professional organisations / bodies
IRELAND	assigned certifiers	registration and supervision by professional organisations / bodies
NETHER- LANDS	quality control instrument	recognition and supervision by national admittance organisation
NORWAY	responsible designer, builder and supervisor	recognition and supervision by the norwegian authority for building quality
SWEDEN	private controller	certification and supervision by swedish accreditation authority

Table 8 illustrates the minimum qualification requirements for the registration of private controllers (Meijer & Visscher, 2017), including:

- A professional or academic degree (architects and engineers);
- Practical experience which must be proven by statements, examples and/or an examination;
- Proper professional liability or indemnity insurance;
- An independent status with no ties or relationships with other parties involved in the design or construction controlled by them.

MINIMUM REQUIREMENTS FOR PRIVATE CONTROLLERS (MEIJER & VISSCHER, 2017)

	QUALITY CONTROLLER		DEMANDS ON				
			EXPERIENCE	INSURANCE	INDEPENDENCY		
ENGLAND	approved inspectors	✓	✓	✓	✓		
FRANCE		✓	✓		✓		
GERMANY	architects, engineers and recognised experts	/	✓	✓	✓		
IRELAND		✓	✓		~		
NETHER- LANDS	quality control instrument	✓	✓	✓	~		
NORWAY	responsible designer, builder and supervisor	✓	✓	✓	✓		
SWEDEN	private controller	✓	✓	✓	✓		

CASE STUDY 1: SWITZERLAND

BEHIND THE SUCCESS STORY

With Zurich having the fourth highest level of quality of life in the world (NUMBEO, 2018), Switzerland serves as a useful case study of a construction and real estate industry which is regulated effectively and transparently, contributing to a built environment which positively impacts the lives of all citizens. From policies (at a cantonal level) down to the

highly skilled labour force, everything has an important contribution to quality in the Swiss built environment. The following insights are taken from the book Economy and Architecture (Odgers, et al., 2015).

Swiss projects are found to achieve better value for money as the architect controls building work, as opposed to the case in the UK, where sub-consulting and risk management tends to increase costs and arguably diminish architectural quality. Swiss architects are responsible for producing cost information within a very well-structured convention. They are also responsible for coordinating work on site. This includes ensuring that the different building trades are on site at the right time and that their work is well executed.

In Zurich and other Swiss cities, it is only possible to buy or rent a flat if it is used as a primary residence. In spite of its housing shortage, the increase in property prices in Zurich is relatively low and stable. The Swiss housing market is regulated and controlled by legislation, and as a result does not follow the boom-and-bust model that is typical of the UK. The Swiss economy operates with a degree of autonomy and independence from the European Union and this attitude is applied to building and homeownership.

In Zurich – as in many other continental European cities – many years have been devoted to developing an urban plan that is democratically approved. This means that although revisions to the plan are onerous and lengthy, developers are never in any doubt as to what volume it is possible to construct on any given site, at a given moment in time, and to what standards of construction works must be carried out. This allows them to effectively quantify building potential, and thus mitigate the element of risk.

Developers tend to be aware of the need to be accountable to society and recognise that something well-built is robust and durable. In contrast to this, the British tend to consider capital costs and financial returns as a much bigger priority.

The SIA (Swiss Engineers' and Architects' Institute) has developed a very reasonable and robust fee charging structure. There are a number of factors that need to be agreed (degree of difficulty, building type and applicable hourly rates), but it is recognised that architects perform a complex and demanding role in the making of buildings, and should be remunerated accordingly.

With over 16,000 engineers and architects (approximately 329 citizens per member), SIA is the main regulating body for the Swiss built environment (SIA, 2018a). The organisation represents architects, civil and structural engineers, building system engineers and environmental engineers. Around 200 committees within the organisation are responsible for developing building standards. SIA is divided regionally into 18 sections, and one international section which ensures that SIA's concerns are met at a local and regional level. Specific technical issues are dealt with by 24 specialist associations.

BROAD ORGANIGRAM OF THE SIA COMMITTEE STRUCTURE (SIA, 2018B)

body in charge of standards	CENTRAL COMMITTEE FOR CODES (ZN)	CENTRAL REGULATI	COMMITTEE FOR IONS (ZO)
subordinate sec- toral committees which direct indi- vidual standards committees	structural design standards	structural building standards	building services and energy standards
around 200 subcommittees			

ORGANISATION: STEERING COMMITTEE

The SIA steering committee currently has 12 members (including a president, two vice presidents, and treasurer). These include, at the time of writing (2018), HVAC engineers, civil engineers, architects and one geologist. The members are elected by the Delegates' Meeting for a four-year term (which can be renewed no more than twice). Furthermore, the Managing Director plays an advisory role on the Steering Committee.

BROAD ORGANIGRAM OF THE SIA HEAD OFFICE - NUMBER OF STAFF SHOWN IN BRACKETS (SIA, 2018A)

MANAGING DIRECTOR (3)					
MANAGEMENT (6)					
ASSOCIATION POLICIES (11)	NORMS (24)	SERVICES (10)	COMMUNICATION (17)	CENTRAL SERVICES (14)	
administration (1pax)	Norms (10 pax)	SIA - form SIA - service	media / redaction	HR	
professional groups / specialised associations	order (performance, competitions, work		projects / events	finance	
	contracts, (7 pax)		customer relationship	IT	
themes / projects / tasks (5pax)	administration (2 pax)			infrastructure	
	publishers (2 pax)			reception	



The SIA consists of four professional groups which autonomously handle issues related to their profession. Each group forms its own professional group council made up of nine members who hold a four-year term. Specialist groups are represented within this council by their own board members.

Tasks include:

- Drawing up professional profiles;
- Supporting SIA's further and continuing training policy;
- Representing the interests of their profession;
- Assisting in the formulation of SIA standards and regulations in their area of expertise.

ORGANISATION: SPECIALIST ASSOCIATIONS

SIA currently has 22 specialist associations (SIA, 2019). An association must consist of at least 100 members and is affiliated with one professional group. Specialist associations are open to non-SIA members, which allows them to receive assistance in coordinating and consolidating their activities.

STANDARDS

The standards and the corresponding codes of practice and documentation are drawn up based on parity by planners, building owners, contractors, suppliers and public authorities, universities and colleges.

The main themes include:

- Energy;
- Education;
- Spatial Planning;
- Public Procurement;
- Planning and building process;
- Building culture;
- International;
- Natural hazards;
- Society and planning.

CASE STUDY 2: UNITED KINGDOM

THE BUILDING PERMISSION SYSTEM

In the United Kingdom (UK), the granting of permission for carrying out building works (or alterations to existing buildings) comprises two approval regimes, which in theory are not mutually exclusive; however, in most cases, one implies the other. The approval routes are:

- Planning; and
- Building Control

Detailed information can be obtained from the following website https://www.planningportal.co.uk/. he salient aspects are described hereunder.

PLANNING

The present setup of the PA in Malta essentially mirrors the UK Planning entity. Specific aspects which are implicitly or explicitly related to being granted full "buildability" permit, assessed by the UK Building Control (BC), are typically handled by various different bodies (e.g. CRPD for

accessibility in Malta, etc). Conversely, certain issues which in Malta fall under the umbrella of the PA, fall under the BC domain in the UK; a case in point is sanitary engineering.

There may be unusual circumstances when a development does not require planning permission (e.g. a small garden extension) but may require BC approval (e.g. design and construction of foundations).

In the UK, the role of planning is to verify compliance with local plans and associated policies. Small-scale projects are typically dealt with directly by the design architect (who, more often than not, is also the architect of record), but for large and complex projects, even large practices would hand over the planning process to a specialist consultant, experienced in handling the various planning nuances. Whilst there exists a national planning framework, boroughs or councils handle applications for developments within their boundaries and each outlines its own borough/ council specific regulations and planning conditions.

There are different planning routes, such as full consent, or outline consent with reserved matters.

At the concept stage, a project (of a considerable size) may, in the first instance, be granted outline permission in terms of general heights, volumes, uses, etc. In addition, a project design code may be established, which will then inform the detailed planning submissions (e.g. materials, appearance etc.).

Outline planning consent is granted subject to seeking approval for conditions (reserved matters) which are developed progressively. These typically comprise reports, studies, etc., from various specialist consultants which better inform the design as it develops. They vary from transport strategies and waste management strategies, to geotechnical surveys identifying the presence or otherwises of archaeological remains. If significant changes to the outline consent are required, rather than a reserved matters application, the planners would require a non-material amendment application, which essentially is a distilled version of an entirely new planning application.

As noted above, a planning application is submitted to the borough/council in which the site is located; the process is thus decentralised. Thus there may be some planning requirements which are very borough-specific (e.g. a riverside borough in London, say Wandsworth, will typically require flood risk assessments to be submitted together with

BUILDING CONTROL

are designed).

On the other hand, BC is intended to ensure that the Building Regulations are adhered to. The Building Regulations mainly address technical aspects ranging from structure, fire, thermal, noise and drainage and also "architectural" matters such as accessibility, servicing (wiring, ventilation etc.) and so on. Essentially, BC addresses all the remaining aspects of the project which ensure that the building provides functionality, comfort and structural stability.

evidence of how this is addressed in the design). Some of the data from the planning application (e.g. a civil engineering report) could inform or supplement items at BC (e.g. with the flood example stated above, this will then define the height of water for which basement retaining walls

BC may be managed through the borough/council itself. Alternatively, the required documentation is submitted to an "approved inspector" (in a public-private-partnership setup) from a list of qualified professionals in the private sector. These are submitted as part of the overall planning application and typically would include calculations, reports (e.g. daylighting, thermal etc.) and any other documentation, including drawings, to demonstrate that the requirements of the Building Regulations are satisfied.

The BC setup also ensures that a number of site inspections are undertaken. The frequency of site inspections is dependent on project size: typically two to three are required for a relatively minor project.

The Building Regulations themselves provide useful information which informs the design. For minor projects such as a small garden extension, demonstrating compliance with these regulations is generally demonstrated satisfactorily through a "deemed-to-satisfy" framework which may be adopted by, say, architects or even builders without resorting to a civil or structural engineer for.

For instance, the structural document has rules-of-thumb-type sizes based on height, use etc., be it wall thickness for load-bearing walls or load-span tables for basic houses with timber floors or even depths/widths of strip footings.

Similarly, tabulated, easy-to-use information is provided to establish gutter sizes without any detailed civil engineering calculation; the size is

simply obtained from a UK map to establish rain load and then read from tables for various roof pitch angles etc.

In some cases (e.g. electrical cabling), vetting by BC is not required, provided that the work is carried out by a certified person. The responsibility would then lie entirely with the contractor who executes the work.

OTHER BODIES

Over and above planning and BC, there are other bodies regulating health and safety and construction design management regulations, i.e. the Health and Safety Executive. Assessment by this body applies to the majority of projects. This is essentially the role of the OHSA in Malta.

Another important role in the construction industry is that of insurers (e.g. National House-Building Council), which are demanding and stringent in terms of submittals required. In addition to drawings, specifications, detailed calculations, etc., insurers would also require additional information such as concreting records, site investigation reports etc. Similar requirements would exist for, say, waterproofing, drainage, finishes, etc.

proposed regulatory framework



The Kamra is proposing the consolidation of building regulation under a single Act, with building codes published and enforced by a single entity, in

The Kamra tal-Periti envisages this document as the starting point for meaningful and radical transformation of the regulatory framework underpinning the construction and real estate industry. It is no longer acceptable for the country to undertake development in the 21st Century with the outdated and fragmented regulations that are currently in place. These proposed changes will bring profound benefits to citizens' quality of life, set standards equivalent or superior to competing real estate markets, help the industry meet UN sustainability goals, and provide legal certainty to property owners, developers and designers. Most importantly, however, a modern building and construction regulation framework will more

The Kamra, indeed, welcomed this White Paper as a step in the right direction. Political commitment has, for decades, been the main hurdle for the critical development of the industry towards higher standards and greater professionalism.

PRINCIPLES OF THE REFORM

comprehensively safeguard public safety.

The Kamra is proposing a broad reform of the building and construction regulation regime that cover all areas of building and construction regulation in a simple yet comprehensive system, catering for small and large projects alike in a flexible manner, while ensuring that regulations can be easily updated as innovations in technologies and methodologies are introduced in the construction industry.

The system the Kamra tal-Periti is proposing is based on ten main principles:

 The planning permit and building permit processes are kept completely separate. Planning processes should be focused solely on planning issues, namely environmental and social impacts, land use, massing and volume, and aesthetics. As a result, the Kamra believes that there would be the potential for a significant qualitative leap in the planning application process, which would also be faster.

- 2. Responsibility and accountability of the various players are driven through processes designed to actively safeguard public safety and consumer interest, rather than passively establishing tort or blame post-accident.
- 3. A well-organised and planned system that channels players through systems and processes that promote high standards, beyond basic structural integrity, is in everyone's interest.
- 4. The construction process has four main phases, namely:
 - a) Pre-construction phase (design and pre-commencement)
 - b) Construction phase (execution)
 - c) Completion phase (compliance certification, handover and occupation)
 - d) Post-occupancy phase (post-occupancy review and certification)

Further elaboration on the above processes can be found in section 5.5.1.

- 5. Regulations governing buildings and construction processes are not intertwined, but kept distinct. Throughout this document, the term "building" is used to mean the end-product, while the term "construction" is used for the process of creating a building.
 - a) Building regulations govern the physical product of the construction process, also known as permanent works; i.e. the apartment block, school, hospital, hotel, etc. These regulations would inform the technical documents produced by architects and engineers when designing and specifying building components, but also as minimum requirements for buildings to be deemed safe and fit for occupation before and after they are brought into use.

Building regulations would ideally be primarily performance-based or functional, with prescriptivity avoided as much as possible. Prescriptive regulations



become obsolete very rapidly and stifle innovation in design, materials and techniques.

Guidance documents providing non-mandatory templates for satisfying the regulations will concurrently be drawn up. They would ideally provide best practice and widely accepted norms that, if followed, would fast-track BCA approval at pre-commencement stage.

In cases where the perit or engineer is of the professional opinion that the minimum performance requirements set out in the building regulations can be better achieved in a manner other than that suggested in the Guidance Documents, the designs and specifications would need to be reviewed by the BCA as part of the pre-approval process, or building permit.

The building regulations, or codes, are outlined in section 5.2.1 below.

- b) Construction regulations cover the construction processes, and all temporary works, such as hoarding and scaffolding, required to ensure that works are carried out safely and with minimal inconvenience to the public. Construction regulations, or codes, covering various aspects of the construction process are outlined in section 5.2.2.
- 4. The functions to regulate and enforce building and construction regulations are consolidated within the BCA. The Kamra is not advocating that the other 22 public entities be shut down, but merely that those functions linked to the assessment of buildings and authorisation and monitoring of construction processes be transferred to the BCA. The affected public entities would remain important stakeholders in the drafting of regulations and guidance documents, but would no longer have a direct role in enforcing them. This would streamline the processes by eliminating fragmentation and bureaucracy, and give a single point of reference for consumers and the public.
- 5. Major projects and public buildings are subjected to an independent review, particularly in terms of structural and fire engineering design. This independent engineering audit would

be similar in principle to financial audits, and would serve as an additional safeguard for projects posing a higher risk to public safety.

6. Contractors will be solely responsible for the construction processes, including the temporary works, and should have full possession of construction sites.

Contractors must also be able to demonstrate skill and competence in their trade to the State through the introduction of a licensing and classification system managed by the BCA.

- 7. The enforcement of construction regulations can be delegated to private service providers specially licensed by the BCA. These service providers, which the Kamra is referring to as Building & Construction Inspectors, would operate in a similar way to archaeological monitors, who are remunerated by the developer but report directly to the public entity.
- 8. Contractors will be required to certify that the executed works comply with the design, specifications and instructions issued by the *perit* and/or engineer. Certification should cover workmanship, materials and products in compliance with the Construction Products Directive.
- 9. The construction process is officially brought to an end through the issuance by the BCA of a Compliance Certificate, which authorises, among other things, that the building can be brought into use. The issuance of such Certificate will be dependent on the receipt by the BCA of the various certifications required from the contractors and professionals appointed on the project, depending on the typology of the building being assessed. Until compliance certification is issued, the status of a construction site is retained and the contractor will maintain its possession.
- 10. Buildings are subjected to periodic checks as pre-determined by the BCA. The purpose of post-occupancy certification to be carried out by *periti* or engineers depending on the building component is to ensure that buildings are still in line with building regulations and are thus still safe for occupation. Any shortcomings identified during such checks would need to be addressed by property owners to the satisfaction of the BCA, and possibly subject to fines.



The Kamra's proposal is based on a system of certifications and Approved Documents, bringing about clarity, accountability, and simplicity.

The Kamra is also recommending the consolidation of pre-, peri-, and post-construction administrative processes, including the submission of documentation relative to the appointment of registered contractors and professionals, third-party damage prevention regulations, EPC design rating, commencement notice, health and safety files, and compliance certification, among others, under the BCA.

BUILDING CODES

The Kamra is recommending that building codes be put in place covering, as a minimum, the following components:

- A. Structure;
- B. Fire Safety & Prevention;
- C. Site Decontamination;
- D. Waterproofing;
- E. Toxic Materials & Substances;
- F. Sound Insulation;
- G. Ventilation;
- H. Sanitation, Plumbing & Hot Water;
- I. Water Conservation;
- J. Drainage;
- K. Waste Management & Disposal;
- L. Combustion Appliances & Fuel Storage;
- M. Protection from Falling, Collisions and Impact;

- O. Access;
- P. Lifts, Escalators & Travellators;
- Q. Electricity;
- R. Security;
- S. Information & Communications Technology;
- T. Illumination;
- U. Materials, Products & Workmanship.

CONSTRUCTION CODES

The Kamra tal-Periti is proposing the consolidation and development of the following construction codes:

- A. Health & Safety in and around Construction Sites;
- B. Construction site operations;
- C. Demolition Works;
- D. Ground Investigation;
- E. Earthworks;
- F. Construction & Alteration Works;
- G. Temporary Works;
- H. Noise Abatement
- I. Environmental Protection;
- J. Waste reduction and disposal;
- K. Machinery, Plant & Equipment;
- L. Insurance.



5.3

The role of *periti* and engineers will be more focused on design, the setting of specifications, monitoring the implementation of the works, and certifying compliance at completion stage in accordance with the Building Codes.

Professional liabilities of the various professionals involved in the design, monitoring and certification of the works will be clearly set out. Liability periods will be aligned with the European average.

3

PRINCIPAL SUBMITTING PERSON

There shall be one *perit* who will assume the role of the Principal Submitting Person (PSP). The role of the PSP shall be that of:

- 1. General oversight and coordination of inputs of the various consultants, including other *periti* and engineers;
- 2. Submitting requests for building permits to the BCA at preconstruction stage;
- Submitting the final certificate of completion to the BCA, which would include the as-built construction drawings, and the certifications of the various professionals and contractors involved in the works confirming compliance with the Building Codes.

This role will follow closely the PSP role introduced in Malaysia in 2007 (Cheong, 2007).

C.

ENGINEERING AUDITORS

The Kamra is also proposing that in very large projects, such as high-rise towers, and public buildings, such as hospitals, the structural and fire engineering drawings are independently reviewed by firms that do not engage in project work, or local work. This system would follow closely the Certification of Design adopted in Scotland in 2003 (SER Scotland, 2019).

The Kamra is proposing the establishment of a new professional figure who would be responsible for the day-to-day monitoring of construction sites to enforce compliance with the Construction Codes.

There shall be minimum qualification requirements similar to those in place for private controllers in various European countries to ensure competence and public safety. The Building and Construction Inspectors (BCIs) will absorb the roles currently held by site managers and enforcement officers, taking on the role of what traditionally was referred to as the clerk of works.

BCIs will be completely independent parties and appointed by the developer from a list of BCIs registered by the BCA.

CONTRACTORS

The Kamra tal-Periti has been calling for the registration of contractors for several years. The success of this reform proposal is also dependent on raising the quality and standards of those tasked with executing the works.

As discussed in section 3.3, a system of registration and classification of contractors based on competence can only happen once a comprehensive set of building and construction regulations, relative training programmes, and mandatory insurance are put in place.

Specifically regarding builders, there should be a distinction between contractors, who should carry the liability, and masons and other labourers employed by contractors to carry out works. Moreover, courses should be developed for different types of civil works, including traditional and vernacular techniques, but also concrete, formwork, metal frame structures, welding, excavation and demolition. There should also be different technical levels, from technical supervisors to apprentices, with different degrees of responsibility.

The Kamra is also proposing that contractors certify their own work to ensure that products, materials and workmanship employed is in line with relative regulations, and the specifications set out by the periti and engineers.

The role of Site Technical Officer would be abolished as it will interfere in the ability of the contractor to fulfil his legal obligations, increasing risk to public safety.

7.

⁴³ See section 4.3



PRE-CONSTRUCTION

The Kamra is proposing a streamlined pre-construction process depending on the typology of the project, as discussed in section 5.1, that would broadly encompass the following steps, particularly in the more onerous construction type:

- 1. Appointment of PSP;
- 2. Submission of building permit application, together with construction drawings and specifications in accordance with the Building Codes; identification of the various professionals involved in the project at design stage;
- 3. Grant of building permit;
- 4. Appointment of contractor/s and BCI;
- 5. Submission of commencement notice, including particulars of BCI and the various professionals and contractors involved in the project at implementation stage; and all other requirements set out in the Construction Codes.



Projects would be classified in four types as per section 4.2.1, namely:

- a) Regular procedure;
- b) Light procedure;
- c) Building notice;
- d) Exempt.

Further classification may be required for existing buildings, in particular heritage buildings.



It is proposed that the completion process includes the following steps:

- 1. Submission of completion certification by PSP, including asbuilt drawings and the various certifications drawn up by the professionals and contractors involved in the project;
- 2. Issuance of a Compliance Certificate by the BCA, which would include the following information:
 - a) Confirmation that the building is safe for occupation;
 - b) Authorisation to the contractor/s to hand over the site to the developer for occupation;
 - c) The requirement for post-occupancy review and certification of the building, indicating type and frequency.

PROPOSED PRE-CONSTRUCTION PROCESS FLOW DIAGRAM



The main change that is being proposed by the Kamra during the construction phase is that contractors will have full possession of the site throughout the works. Contractors, who will be responsible for the health and safety in and around sites at all times, will need to grant authorisation to anyone wishing to enter a site, or simply notified in the case of the PSP and BCI.

If works are split among multiple contractors, there should be one main contractor appointed by the developer taking responsibility for the entire site nonetheless, as happens normally in advanced countries.

POST-OCCUPANCY

A critical aspect of this proposal is the introduction of post-occupancy certification to ensure safety of buildings throughout their lifetime. The frequency and building components to be certified will vary depending on building use, construction methodology, size and other factors. Section 3.1.4 illustrates existing post-occupancy certifications, such as that of lifts which are now well-established. It is envisaged that post-occupancy certification systems will not only provide benefits to public safety, but also greatly enhance the long-term quality of buildings, particularly at design and construction stage, to ensure durability of materials and fabrication.

IMPLEMENTATION

The proposed reform would require the following sequence of institutional and legal measures to occur:

- 1. The removal of all building regulation and control from the planning aplication process, including sanitary engineering;
- 2. The complete transfer of the building regulation remit to the BCA;
- 3. The complete transfer of the construction regulation remit, including health and safety in construction sites, to the BCA;
- 4. The repeal of various legal provisions, including those found in the Code of Police Laws, and concomitant drafting of a comprehensive suite of building codes, that also cover areas which remain completely unregulated to this day;



- 5. The establishment of streamlined pre-construction processes, including the independent review of civil engineering inputs, such as structural analysis and design, and fire prevention and fire safety of major projects and public buildings;
- 6. The establishment of a register of independent professional building and construction inspectors (BCIs) that will be responsible for monitoring the correct implementation of the Construction Codes. It is envisaged that the system of appointment of BCIs would be similar to that currently utilised by the Superintendence of Cultural Heritage for archaeological monitors, and will replace the roles of site manager and project supervisor scattered in various pieces of legislation;
- 7. The proper implementation and enforcement of the regulations concerning certification of building products and materials manufactured locally in accordance with the relevant European Directive;
- 8. The development and expansion of skill card courses for all labourers and technicians operating in the construction industry, including masons and electricians, as well as a corresponding card issued by the respective Chambers for professionals visiting construction sites (architects, engineers, quantity surveyors, project managers etc.) to establish a minimum threshold of good site behaviour and practices across the entire industry;
- 9. The establishment of a register of contractors, licensed and classified according to technical capacity, and the mandatory requirement for insurance cover for all operators in the industry;
- 10. The establishment of a post-completion building certification system, including a repository for construction and engineering drawings. This may, over time, be substituted, in part or entirely, by the submission of an electronic BIM model of the entire building, which includes architectural, structural, MEP and any other information recorded for posterity; such requirements may initially be required for major projects and public buildings, and gradually include all projects above a minimum size. Issues of intellectual property (IP), copyright and audit trails would need to be resolved;

- 11. The establishment of post-occupancy periodic certification systems, similar to the system the MCCAA currently has in place for certification of lifts;
- 12. Consolidation of liability periods within the building regulation system, and the development of systems for clear identification of chain of responsibility for various design and construction processes.

MANAGING CHANGE

The Kamra recognises that such an upheaval requires careful change management to ensure that the impact on the industry and the livelihood of thousands whose employment depends directly and indirectly on it are not adversely affected. Indeed, it is the Kamra's considered view that this reform will create new jobs, generate real and significant value to the property market, promote public safety, and mitigate the environmental impacts of the construction industry

The Kamra is fully committed to supporting Government and other stakeholders in bringing about this change, putting at Government's disposal all its resources, technical capacity, and expertise, including through its affiliations to international organisations such as the Architects' Council of Europe and the European Council of Civil Engineers.

This section outlines a series of proposals on how this change could be implemented.

Change management can be approached in one of two ways: the Big Bang Approach, and the Incremental, or Phased-In, Approach. Both have their merits and drawbacks, which are outlined in Table 1 below.



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BIG BANG	INCREMENTAL / PHASE-IN
immediate implementation of the vision	a more gradual roll-out of reforms over an extended period of time
requires all regulation to be up-to-date published, and stakeholders adequately trained	regulation can be redrafted and rolled out over a longer period, affording greater time for research and training of stakeholders
a shorter implementation period will ensure that the original vision and drive accompany the reform through to completion	a more gradual implementation may be undermined with a change in leadership or political direction, or result in incoherent outcomes
a significant amount of resources must be made available as quickly as possible	financial and human resources can be gradually increased in unison with the planned phasing-in of the regulatory changes
sudden change risks mounting resistance from internal (civil servants) and external stakeholders (periti, engineers, developers, tradesmen) due to uncertainty if not planned carefully, undermining the entire endeavour	gradual change provides time for stakeholders to adjust and modify their processes, costings, contractual arrangements, fees, etc., and become aware of any changes in responsibilities

The Kamra tal-Periti is proposing a short phased-implementation approach, which would be completed within not more than 3 years. This will provide sufficient time to legislate and consolidate all the disparate building and construction regulations outlined in Chapters 2 and 3 into a series of Building and Construction Codes. A lengthier implementation period risks being undermined by fatigue and other externalities.

The Kamra is proposing a phased implementation of this reform as outlined below.

PHASE 1A - TRANSFER OF REMIT

START: MONTH 0

END: MONTH 6

The first phase will consist in the transfer of the various building regulation remits from a number of public entities discussed in Chapter 1 to the BCA. In this first phase, building regulation will continue to be exercised through the planning regime as at present. However, the BCA will be the sole external consultee, other than the SCH, Transport Malta and the Local Councils, on planning applications.

This would entail amending L.N. 162 of 2016 Schedule 3, which lists the external consultees in the planning application process. The Kamra is proposing that the consultative roles of the CRPD, OHSA, WSC, Enemalta, CPD, and EHD be replaced with the BCA.

The certification of lifts and air-conditioning systems and the registration of ACABs is also to be transferred from the Technical Regulations Division of the MCCAA to the BCA.

The above entities will in turn become consultees of the BCA, with the exception of WSC and Enemalta which should be replaced by REWS, in the formulation of new or updated regulations that affect their respective remits. However, the process of reviewing planning applications in accordance with existing building regulation and guidance documents, such as the Access for All Guidelines, the Design guidelines on fire safety for buildings in Malta, and the Health & Sanitary Regulations would be transferred to the BCA.

Grant schemes for energy efficiency currently administered by REWS would be replaced with new schemes establishing minimum performance improvement targets for buildings, rather than providing grants for specific components, and would be administered by the BCA. Other grant schemes for retrofitting of measures to improve fire safety, access for persons with disability, energy conservation, waste management and water conservation would start being introduced.

The roles and functions currently held by the BRO, BRB and Masons' Board will be consolidated under the BCA. The skill cards scheme courses currently organised by the BICC will also be transferred to the BCA.

These initial changes will ensure that the BCA firmly establishes its role as the central organisation for building regulation, while leaving industry stakeholders largely unaffected by the transition in these critical early stages. It is essential, however, that extensive consultations and discussions be carried out with public sector employees' unions to ensure that employment rights and working conditions of the affected civil servants are safeguarded, if not improved.

It is envisaged that this first phase would be concluded within 6 months, provided adequate financial resources are allocated, and that the relevant primary and subsidiary legislation are swiftly amended to accommodate these changes.



START: MONTH 0

END: MONTH 24

The BCA will immediately embark on the development of new Building and Construction Codes in partnership with the Kamra tal-Periti and the Chamber of Engineers. This process should be concluded within 24 months. The CRPD, CPD, REWS, and other public agencies will be key consultees throughout the process during which the Civil Code, Code of Police Laws and various other pieces of primary and subsidiary legislation are cleaned up to ensure that obsolete or fragmented regulation be consolidated under the new codes.

7.3

PHASE 2 - REGISTRATION OF CONTRACTORS

START: MONTH 24

END: MONTH 36

On completion of Phase 1B, the focus of the BCA would shift to the setting up of a register of contractors, and training courses for all stakeholders.

Concurrently, the Development Planning Act is to be amended to eliminate all processes concerning building regulation, including consultation with the BCA during the planning application process, the submission of commencement notices, and the application for compliance certificates. The PA's permitting process will be solely concerned with land use, density, transport, environmental impacts, building heights, and other planning related issues. It is envisaged that the processing of planning applications for Non-Schedule 1 developments, from the end of the public consultation period to the publication of the Case Officer's Report, should not exceed 4 weeks as a result, barring the requirement for changes as a result of consultations.

80

WIDER REVIEW OF INDUSTRY

The introduction of a modern building and construction regulation framework in Malta is an important step in addressing critical failures within the industry. Nevertheless, other legislative and policy reforms are required in related fields.

These include policies such as the piecemeal redevelopment of sites, which expose the public to high levels of risk and inconvenience, environmental degradation, and mental and physical health issues within the community.

Planning policies such as minimum parking requirements and the Commuted Parking Payment Scheme (CPPS) are directly responsible for applying significant pressure to carry out the dangerous practices of excavating in narrow infill plots surrounded by residents

The Kamra also believes that Maltese society will benefit greatly from a Party Wall Act, similar to that in force in the UK, which incorporates elements from the Clvil Code related to servitudes together with issues about safety and structural integrity.

Looking further beyond, the industry also requires the bringing into force of the revised Periti Act which has been pending since 2007. The Kamra tal-Periti needs this legislative instrument to be passed as soon as possible to be able to bring into force various upgrades and changes to the profession that have been stalled for over a decade now. Among these changes, are the inclusion of two separate lists of warrant holders under the title of Perit Arkitett (licensed architect) and Perit Inginier Civili (licensed civil engineer), and the strengthening of the Kamra's role in regulating professional conduct by introducing specialised investigation boards and more proportionate and effective sanctions for unethical or negligent conduct by members of the profession.

No single reform will address all the problems that have been besetting the industry for the past few decades. However, Government and stakeholders have a duty to act swiftly and decisively in the interest of the common good.



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SCHEDULE OF LAWS & REGULATIONS

CHAPTER	LEGAL NOTICE	TITLE
10		Code of Police Laws
10.11	G.N. 110 of 1934	Construction of Houses and Drains Regulations
10.40	L.N. 124 of 1995	Maintenance of Good Order at Places of Entertainment Regulations
16	! !	Civil Code
244	 	Swimming Pools (Control) Act
321		Engineering Profession Act
390	i ! !	Periti Act
390.01	G.N. 202 of 1920	Chamber of Architects Regulations
409.04	L.N. 351 of 2012	Tourism Establishment Regulations
409.11	L.N. 131 of 2002	Holiday Premises Regulations
409.15	L.N. 175 of 2004	Catering Establishment Regulations
411	¦ 	Civil Protection Act
413	, 	Equal Opportunities (Persons with Disability) Act
423.09	L.N. 225 of 2010	Electrical Installations Regulations
424	 	Occupational Health and Safety Authority Act
424.15	L.N. 44 of 2002	Work Place (Minimum Health and Safety Requiremnts) Regulations
424.29R	L.N. 88 0f 2018	Work Place (Minimum Health and Safety Requirements for Work at Construction Sites) Regulations
427.37	L.N. 79 of 2016	Lifts Regulations
427.63	L.N. 231 of 2007	Inspection of Lifts Regulations
427.83	L.N. 462 of 2011	Construction Products (Implementation) Regulations
435	;	Environment Protection Act
441.04	L.N. 119 of 2002	Activities Requiring Permit by Local Councils Regulations
445		Cultural Heritage Act
465	; 	Public Health Act
465.02	L.N. 129 of 2005	Swimming Pools Regulations
510	 	Malta Competition & Consumer Affairs Authority (MCCAA) Act
513	' 	Building Regulation Act
513.01	L.N. 47 of 2018	Energy Performance of Buildings Regulations
513.06	L.N. 136 of 2019	Avoidance of Damage to Third Party Regulations
513.05	L.N. 225 of 2016	In-Building Physical Infrastructure (Access to Electronic Communications Services) Regulations
545		Regulator for Energy and Water Services Act
545.01	G.N. 223 of 1940	Electricity Supply Regulations
545.07	L.N. 146 of 1998	Control of Swimming Pools Regulations
545.24	L.N. 225 of 2010	Electrical Installations Regulations
545.63	L.N. 184 of 2011	Waste Regulations
552		Development Planning Act
552.09	L.N. 295 of 2007	Environmental Management Construction Site Regulations
552.13	L.N. 162 of 2016	Development Planning (Procedure for Applications and their Determination) Regulations
552.22	L.N. 227 of 2016	Development Planning (Health and Sanitary) Regulations
595.08	L.N. 340 of 2016	Energy and Water Agency (establishment as an Agency) Order

Arrigo, M., 2017. Malta needs a National Annex to cater for earthquake events. [Online] Available at: https://www.timesofmalta.com/articles/view/20170129/business-news/Maltaneeds-a-National-Annex-to-cater-for-earthquake-events.637941 [Accessed 3 July 2018].

Caruana, C., 2018. Noise pollution law is in the air: First step would be regulatory framework. [Online]

Available at: https://www.timesofmalta.com/articles/view/20180105/local/noise-pollution-law-is-in-the-air.667177 [Accessed 5 May 2018].

Chadwick, E., 1842. Chadwick's Report on Sanitary Conditions. [Online] Available at: http://www.victorianweb.org/history/chadwick2.html [Accessed 28 April 2019].

Chamber of Engineers, 2017. Engineering Profession. [Online] Available at: https://www.coe.org.mt/profession [Accessed 14 May 2019].

Cheong, Y. P., 2007. LAW & REALTY: Understanding the new CCC. [Online]

Available at: http://www.malaysianbar.org.my/conveyancing_practice/law_realty_
understanding_the_new_ccc.html
[Accessed 15 May 2019].

European Commission, 2015. Science for Environment Policy: Noise impacts on health. [Online]

Available at: http://ec.europa.eu/environment/integration/research/newsalert/pdf/47si.pdf [Accessed 5 May 2018].

Evans, H. M. A., 2015. Guide to the Building Regulations. 3rd ed. London: NBS.

Filippi, M., 2015. Remarks on the green retrofitting of historic buildings in Italy. Energy and Buildings, Volume 95, pp. 15-22.

Kamra tal-Periti, 2007. The Urban Challenge – Our Quality of Life and the Built Environment. [Online]

Available at: https://kamratalperiti.org/wp-content/uploads/urbanChallenge.pdf [Accessed 30 April 2019].

Kamra tal-Periti, 2016a. PR 05/16 I The Kamra tal-Periti urges Government to introduce Building Regulations that reflect contemporary needs. [Online]

Available at: https://kamratalperiti.org/pr-0516-the-kamra-tal-periti-urges-government-to-introduce-building-regulations-that-reflect-contemporary-needs/ [Accessed 13 May 2019].

Kamra tal-Periti, 2016b. Letter to PS Deborah Schembri: The New Commencement Notice Procedure. [Online]

Available at: http://kamratalperiti.org/wp-content/uploads/KTP-Commencement-Notice.pdf [Accessed 13 May 2019].

Kamra tal-Periti, 2017. PR 08/17 I Urgent Call for Building Regulations. [Online] Available at: https://kamratalperiti.org/pr-0817-urgent-call-for-building-regulations/ [Accessed 13 May 2019].

Kamra tal-Periti, 2018. Comments by the Kamra tal-Periti on the Malta Building and Construction Authority. [Online]

Available at: https://kamratalperiti.org/wp-content/uploads/MBCA-white-paper-final.pdf [Accessed 28 April 2019].

Meijer, F. & Visscher, H., 2007. Regulatory systems for building in Europe. Delft: Delft University of Technology.

Meijer, F. & Visscher, H., 2008. 'Building regulations from an European perspective', In: Proceedings of COBRA 2008 - The construction and building research conference of the Royal Institution of Chartered Surveyors. Dublin, RICS.

Meijer, F. & Visscher, H., 2017. Quality control of constructions: European trends and developments. International Journal of Law in the Built Environment, 9(2), pp. 143-161.

Meijer, F., Visscher, H. & Sheridan, L., 2002. Building regulations in Europe, Part 1, A comparison of the systems of building control in eight European Countries. Delft: Delft University Press.

MFIN, 2018. The Budget 2019 - Financial Estimates 2019 (Final). [Online] Available at: https://mfin.gov.mt/en/The-Budget/Documents/The_Budget_2019/Estimates%20 2019.zip [Accessed 8 May 2019].

Miceli-Farrugia, A. & Bianchi, P., 2009. Modernist Malta: the architectural legacy. Gzira: Kamra tal-Periti.

NUMBEO, 2018. Quality of Life Index Rate. [Online] Available at: https://www.numbeo.com/quality-of-life/rankings_current.jsp [Accessed 4 September 2018].

Odgers, J., McVicar, M. & Kite, S., 2015. Economy and Architecture. 1st ed. Abingdon: Routledge. Pedro, J. B., Meijer, F. & Visscher, H., 2009. 'Comparison of tasks and responsibilities in the building control systems of European Union countries', In: Proceedings of COBRA 2009 - The construction and building research conference of the Royal Institution of Chartered Surveyors. Cape Town, RICA.

Pedro, J. B., Meijer, F. & Visscher, H., 2010. Technical building regulations in EU countries: a comparison of their organization and formulation. Manchester: CIB World Congress - Building

a better world.

Pedro, J., Meijer, F. & Visscher, H., 2011. Comparison of building permit procedures in European Union countries. Delft: Delft University of Technology.

Sapiano, M., 2008. Measures for facing Water Scarcity and Drought in Malta. European Water, Volume 23, pp. 79-86.

Schembri Orland, K., 2019. A strong commitment to protect cultural heritage is our duty for future generations – President. [Online]

Available at: http://www.independent.com.mt/articles/2019-01-29/local-news/Astrong-commitment-to-protect-cultural-heritage-is-our-duty-for-future-generations-President-6736202816 [Accessed 09 May 2019].

SER Scotland, 2019. Scheme for Certification of Design (Building Structures) in Scotland. [Online]

Available at: https://www.ser-ltd.com/ser-scotland/about-the-scheme [Accessed 15 January 2019].

Sheridan, L., Visscher, H. & Meiher, F., 2003. Building regulations in Europe, Part 2: A comparison of the technical requirements in eight European countries. Delft: Delft University Press.

SIA, 2018a. The SIA. [Online] Available at: http://www.sia.ch/en/the-sia/ [Accessed 4 September 2018].

SIA, 2018b. Committees. [Online] Available at: http://www.sia.ch/en/the-sia/committees/ [Accessed 4 September 2018].

SIA, 2019. Specialist Associations: Overview. [Online] Available at: http://www.sia.ch/en/the-sia/specialist-associations/overview/ [Accessed 13 May 2019].

Van der Heijden, J., 2009. Building regulatory enforcement regimes. Comparative analysis of private sector involvement in the enforcement of public building regulations. Delft: Delft University Press.

WHO, 2018. http://www.euro.who.int/en/health-topics/environment-and-health/noise/noise. [Online]

Available at: http://www.euro.who.int/en/health-topics/environment-and-health/noise/noise [Accessed 5 May 2018].

Wismayer, A. et al., 2016. "Occupant behaviour at the Presidential Palace of San Anton, Malta: A study supporting the development of a methodology to enhance energy efficiency in heritage buildings", In Proceed.: Europe and the Mediterranean: Towards a Sustainable Built Environment. Valletta, SBE Malta Sustainable Built Environment.

