





MODERN METHODS OF CONSTRUCTION: HOUSING DELIVERY INNOVATION

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MINISTERIAL FOREWORD

As Minister for Housing and Communities, I am particularly interested and excited about the role modern methods of construction (MMC) can play for housing delivery in Jersey.

The first 100 days of my ministerial office have been spent understanding the complexities of the housing challenges in Jersey. A key area is the need to increase housing supply, which means not only making better use of the homes we already have, but also creating the momentum and capacity to build more, and faster. I have prioritised the progression of this MMC report in support of the Chief Minister's first 100 days action plan to bring forward propositions for the development of wider modern methods of construction and to identify ways the government can work better with the construction industry - who are already innovating the way homes are built – to enable growth in this area.

The homes we build need to embrace technologies which make the construction process as efficient as possible, whilst achieving high-quality homes. There is a real opportunity here to put Jersey at the cutting edge of modern methods of construction, in a way that will deliver us the well-designed, good-quality and energy-efficient homes that we so desperately need.

I am impressed by the commitment already shown within the industry to innovate and build better. The challenges presented by different types of MMC within our island context are complex and cannot be addressed in isolation. By working collaboratively across Government, together with our States' owned entities, and the wider construction sector, we are able to pool our talents and address them.

Only by working together in this way, harnessing the skills, experience and expertise of Jersey's construction industry to bring forward the newest technologies for the island, can we provide more sustainable and deliverable housing for Jersey.

I extend my greatest thanks to all those who have taken the time to contribute to this report, and the preceding work that has brought us to this point.



Deputy David Warr
Minister for Housing and Communities



INTRODUCTION

Modern methods of construction, known as MMC, is a generic term used to describe a building process which uses prefabrication and factory assembly as a fast way of delivering new buildings. It maximises the efficient use of building materials, construction workforce and resources.

It can provide prefabricated solutions to on-site construction challenges and offers the opportunity to rethink the design and build of both housing and other buildings such as schools, hotels and health care facilities. For the purposes of this report, the focus will be on the role of MMC in housing supply for Jersey.

Elsewhere in Europe, the adoption of MMC – alongside traditional construction methods – is increasing as countries realise the potential such building methods offer to provide for a better, quicker out-turn product whilst also improving standards of build, sustainability, environmental performance, and programme delivery.

A number of building methods come under the broad definition of MMC – from the use of off-site prefabricated elements, such as kitchen and bathroom pods and timber or steel frame panel system construction, to a full 3D volumetric build (i.e. a fully constructed living space) which is produced in a controlled factory environment and transported to site. 3D modular builds range from a basic shell, which can be finished on site, to a complete residential unit that includes all internal walls, kitchen and bathroom fittings and all finishes. Units being factory produced in a controlled environment allows for quality, speed and consistency. 3D volumetric modular housing units built elsewhere and shipped onto a prepared site can provide a complete turn-key housing solution.

Off-site production methods mean that the majority of the building process will not be affected by delays on site, such as weather or skills shortages. This method is particularly useful in residential housing development, including social housing provision and large-scale builds such as apartment blocks and high-rise accommodation.

The use of MMC complements existing traditional building techniques, bringing increased choice and opportunity together. The ability to plan and commission builds to meet demand without the traditional construction lead-in time is both useful and flexible, meaning there can be a build solution for almost every site. This improved viability provides the ability to build at both speed and scale. The broad range of design options available means that materials, density and design details can all be tailored to the site and the local vernacular to provide the standards of quality and liveability.

The right choice of MMC product can offer consistently high build quality as the components and modules are precision-engineered and produced in a controlled factory environment, providing reassurance to the end user together with the opportunity to be more eco-friendly by using sustainably sourced materials and reducing waste.

With the challenges facing the construction industry including supply chain issues, labour shortages and climate dependencies, MMC is a proven route to improved build times, on site productivity, ensuring consistent build quality, and providing a reduced operations and maintenance (O&M) resource requirement for a wide range of buildings from domestic residential to hotels, educational buildings and medical and healthcare premises.



TYPES OF MODERN METHODS OF CONSTRUCTION

Within the UK building sector there are seven main categories of modern methods of construction, and the use of this regularised terminology allows the wide range of MMC construction type to be better understood. The definition framework spans all types of premanufacturing, site assembly, material use and innovative processes.



Category 1 – Pre-manufacturing (3D volumetric structural systems)

A systemised approach based on volumetric construction involving the production of threedimensional units built in a factory setting and shipped to site as a complete unit for final installation.

These volumetric units range from a basic structure-only unit to one with all internal and external finishes and services installed, all ready for installation. The system includes structural performance. Full volumetric units in apartment buildings can include non-domestic living space and common areas, for example internal corridors and balconies. Mini volumetric structural units can include bathroom pods, and the like, which are structurally stacked and loaded.



Category 2 – Pre-manufacturing (2D primary structural systems)

This is a systemised approach using flat panel units used for basic floor, wall and roof structures which are produced in a factory environment and assembled on site to produce a three-dimensional structure. The most common approach is to use open panels, or frames, which consists of a skeletal structure only, with services, insulation, external cladding and internal finishing all being installed on-site. More complex panels, such as closed panels, involve more factory-based fabrication which include lining materials and insulation. These may also include services, windows, doors, internal wall finishes and external claddings.



Category 3 – Pre-manufacturing (non-systemised primary structure)

The use of pre-manufactured structures made of framed or mass engineered timber, cold rolled or hot rolled or pre-cast concrete is the most common form of this construction. Load bearing beams, columns, walls, core structures and slabs are not usually in-situ and are constructed on site. This category, although focused on superstructure elements, can also include essential substructure building elements such as prefabricated ring beams, pile caps, driven piles and screw piles.



Category 4 – Additive manufacturing (structural & non-structural)

This is remote, site based or final workplace-based 3D printing of parts of buildings using specialist materials, digital design and manufacturing techniques.



Category 5 – Pre-manufacturing (non-structural assemblies & sub-assemblies)

This includes a series of different pre-manufacturing elements such as unitised non-structural walling systems, roofing finish cassettes or assemblies, and non-load bearing mini-volumetric units (referred to as 'pods') used for the highly serviced and repeatable areas such as kitchens and bathrooms, utility cupboards, risers, plant rooms, including items such as wiring looms and mechanical engineering hardware.

Category 6 – Traditional building techniques, product-led site labour reduction and productivity improvements

This includes traditional single building products manufactured in large format, pre-cut configurations or with easy jointing features to reduce extent of site labour required to install.

Category 7 – Site process-led site labour reduction / productivity / assurance improvements

This category is intended to encompass innovative site-based construction techniques to bring about process improvement not covered in categories 1-6. This category of MMC includes technical on-site build improvements such as 3D printing, robotics and technology-led plant and machinery.

Categories considered

In Jersey, categories 1, 2, 3 and 5 have been utilised across several developments, both private and public. The use of MMC techniques in categories 3 and 5 (i.e. pre-cast elements that are configurable on site and kitchen and bathroom pods) are already used effectively within the construction sector, with uptake and supply chain logistics working well.

This report will mainly consider categories 1 and 2 (pre-manufactured 3D volumetric structural systems and 2D primary structural systems) as these options are currently the least used in Jersey and can provide the most potential in offering the quickest route to house building. Both categories can fit well within the Jersey context, alongside the more traditional construction techniques already in use, in the future and subject to specific enabling actions that Government can support, which are outlined later in this report.



GOVERNMENT OF JERSEY

The strategic context for modern methods of construction

Jersey is a small island nation with finite land and resources. Our evolving population, coupled with changes to how people live, means there is a continued need to provide more homes for islanders.

The Bridging Island Plan (BIP) sets out that 4,000 new homes need to be provided over a five-year supply period (2021-25) in order to meet current and projected housing needs. This level of provision requires the delivery of 800 units per annum, representing a doubling of the historic housing delivery rate (400 pa), as seen over the last decade. These homes are to be a mix of sizes and tenures, with over 1,400 of these homes to be delivered for affordable purchase or rent

Given the current levels of construction activity in the island, the ability for local contractors and sub-contractors to meet this new level of output will be particularly challenging. Importing offisland labour / sub-contractors and deploying MMC will be required to meet this increase in supply.

MMC can directly support Jersey's construction sector capacity, and boost overall performance by:

- Shorter delivery times, resulting in faster occupation of new units and earlier developer investment return through faster completion on site
- Improved safety and security on the construction site
- Minimised disruption to normal operations on or around the site
- Certainty over a housing delivery programme once units ordered from the factory
- Less reliance on traditional construction skills and building supplies, which are both in short supply and at increasing cost.

Work to date

In response to the published document, <u>Creating better homes: an action plan for Jersey</u>, and its priority to drive an 80% increase in housing starts by 2025, the Minister for Housing and Communities published a <u>Modern methods of construction report (May 2022)</u>. This was commissioned to investigate how MMC could assist with increasing housing supply, carbon performance and sustainability; and help improve housing affordability.

The use of prefabricated construction techniques is not new, and the use of new manufacturing construction technologies is increasing across Europe. Residential construction, in particular, has seen significant growth over the past ten years with more than a hundred companies throughout the UK and Europe providing packaged and turn-key solutions designed to meet a range of residential needs from low rise houses to apartment buildings of up to 40 stories.

Impact on the local construction market

Jersey's construction industry has the capacity to build 400 units per annum, which was demonstrated in the Census findings where 3,922 units were built over 10 years. This number does not include refurbishments and commercial premises, which also place pressure on construction sector capacity. It is important to note that since the Census was completed, there has been a significant shortage of labour across many business sectors of the island including construction, and on-island construction sector capacity may have already reduced as a result. It is suspected that the reason for this is the difficulty of importing European labour post Brexit and the high cost of living and accommodation. If this trend continues, Jersey's on-island construction capacity will be further limited, creating greater reliance on off-island subcontractors and/or MMC.

It is important to note that whilst MMC can play a significant role in supporting construction sector capacity, it will not remove the need for traditional methods of construction, typically being required for general extensions to houses, commercial offices, refurbishments, home improvements, small apartment developments and bespoke houses. Even where MMC can be easily deployed, there will still be parts of the build that require traditional techniques, such as ground works, excavations, foundations, formwork and concrete for base levels and cores, roofs, and façade.

It is therefore still considered vital that the capacity and skills within our local construction sector are maintained and increased, to ensure the local market has the ability to flex to different requirements and sustain delivery. A wider uptake of MMC in Jersey will nevertheless significantly reduce pressure on specialist trades such as tilers, plumbers, electricians, carpenters and decorators, depending on the type of MMC being deployed, and in response to specific capacity and deliverability pressures that may be being felt at any given time.

Where a developer has the ability to do so, schemes can be designed to such a level that their developments can be built either traditionally or through modular build, in order to provide the necessary flexibility at the time of tendering the construction to achieve the most benefit for delivery.

MMC to improve speed of housing delivery

It is important to note that the "pre-development" period for modern methods of construction, including modular build, will be the same as a traditional build. Thus, time savings can only be realistically achieved during construction phases. This excludes enabling and bespoke works that will be required and which will call for traditional construction methods.

For example, there are States of Jersey Development Company schemes currently in design stages and which are considering modular options. These schemes include requirements for basements, commercial and non-residential ground floor uses, together with a quality façade and green roofs, and this will require approximately 40% of the build to remain traditional.

The period to construct these elements will take the usual time. However, whilst these works are underway, modules can be commissioned from a supplier, built in the factory and delivered to site when the first-floor level is being completed. It is at this point where MMC and modular

forms of construction provides time savings in terms of build duration as the prefabricated components can be put in place very quickly. This can then potentially offer a reduction in the construction period of approximately 25%.

The table below provides real time comparisons of traditional build vs. MMC across the development stages;

Comparison table of project durations (months for traditional build vs modular build – 3D volumetric)

Pre-Development Activity	Traditional Build months	Modular Build - 3D Volumetric months
Appointment of architect with a brief	2	2
Designs up to RIBA Stage 3	5	5
Submission & determination Planning Dept.	6	6
Detailed design up to RIBA Stage 4a	3	3
Submission & determination Building Control		
& Design RIBA Stage 4b	3	3
Pre-sales, funding & construction tender	5	5
Start on site	0	0
Total number of months	24	24

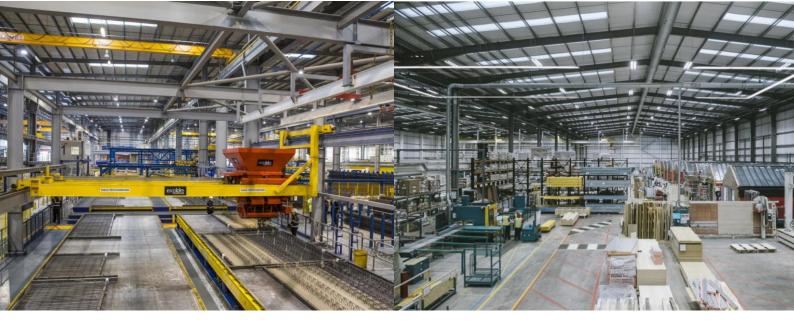
Development Activity	Traditional Build months	Modular Build - 3D Volumetric months
Ground works (basement and piling)	9	9
Superstructure	8	4
Façade	3	3
Fitout / Install of modules	7	3
Landscaping	3	3
Total number of months	30	22

Total number of months	54	46

Notes / assumptions:

Timescales are based on a 150-unit scheme.

Timescales assume basement - note the time savings on modular would be less without the basement as lead-in and manufacture times would not fully overlap with a reduced groundworks programme.



Identifying and addressing the challenges

Modular building manufacturers and suppliers are heavily bought into the roll-out of MMC. All believe that they have the ideal MMC product which they can supply at a fraction of the unit cost of a traditional build, and, that it can achieve construction completion in record time.

The States of Jersey Development Company, in their research on MMC, identify that these claims have to be treated with a degree of caution. All prospective suppliers need to have been through an appropriate due diligence process to verify the products are fit for purpose.

These claims often overlook the context of building in Jersey as they do not take into account:

- Building control requirements
- Planning requirements
- Mortgage provider requirements
- PI insurance / collateral warranties
- Logistics and ports capacity
- Costs / third party funding issues

Building Control

Building Control confirm that there are no objections to modular construction where it can meet local build standards. There is flexibility within the building bye-laws of the Planning and Building (Jersey) Law 2002, to adopt a flexible approach, where this is appropriate.

In addition, modular companies will need to meet both local Building Control and the UK fire requirements, conforming to the new fire regulations in the UK following the Grenfell disaster and building safety standards which continue to be a high priority.

A prioritised building control pre-application advisory service can help to ensure that prospective suppliers and designers of schemes which will utilise MMC are able to verify, at the earliest opportunity, whether or not the proposed method may be regarded acceptable, and if changes may be possible to bring the method and design into compliance.

Planning

There are specific design challenges for new development in the island, established through the island Plan. These include the physical appearance, materials, scale, mass and height of the buildings relative to their local context and their internal and external space and layouts. Supplementary planning guidance and pre-application advice support for developers in bringing forward new forms of MMC will help progress delivery by making planning expectations as clear as possible.

For modular, volumetric forms of MMC, some suppliers provide their modules with facades which will not have the flexibility to provide the quality or local architectural vernacular that would be expected in Jersey. To provide the best design choice for Jersey it is important that the modular companies are able to respond to local design requirements, and for the product to be adaptable, such as being delivered as part of a hybrid scheme which may include traditional forms of construction. To make bespoke volumetric designs viable, they need to be delivered at-scale. As such, this approach will not be easily achieved for smaller-scale bespoke schemes and, coordinated construction programmes to create efficiencies through both scale and a standardised building typology should be explored.

Mortgage Availability

JDC have initiated discussions with local mortgage lenders who confirmed they will provide mortgages on modular constructed units, provided they meet BOPAS and NHBC accreditation. This means that modular companies wishing to provide a product for Jersey will need to have these accreditations or, be in the process of obtaining them if they already have the European equivalent.

Logistics and ports capacity

For Jersey, the use of MMC to meet immediate housing needs, brings with it some logistical challenges including:

- Limited port capacity 98.6% of all goods already enter Jersey via the port.
- Road network, including width and turn restrictions.
- Shortages in labour skills for assembly and traditional construction methods.
- Limited facilities suited to the delivery, storage and marshalling (i.e. the handing and sequencing to meet demands) of Category 1, i.e. 3D volumetric MMC products.

In the recently published ARUP MMC report, it was identified in consultation with local construction stakeholders, MMC manufacturers and logistical partners, that none of the above challenges were seen as a 'showstopper' to using MMC and in particular, the use of 3D full volumetric MMC to deliver housing.

Whilst there are risks with any building development programme, many of the logistical issues in Jersey can be overcome with careful preparation, additional support for the sector, planning advice and assistance, together with the use of appropriate sites with sufficient access for volumetric products with suitable craneage. It is accepted, however, that there will be some sites and products that will not be able to overcome these challenges.

The planned regeneration of the St Helier Harbours presents a key opportunity to ensure that adequate ports capacity exists to accommodate greater levels of construction material importation.

PI Insurance / collateral warranties

For developers Professional Indemnity Insurance is becoming harder to obtain and has become very expensive in recent years. Only companies with a track record and of a reasonable size can obtain this insurance.

In terms of collateral warranties, these are only valid if the company providing them is still around to correct any issues over the term of the warranty. Collateral warranties are essential to manage development risks, such as where there are found to be defects in work, collateral warranties provide a route for contractual recourse. In their absence, a developer can be left with a defective development and significant financial losses. It is crucial that due diligence is undertaken on all contractors to ensure they have both the necessary experience and a track record of delivering projects of the size and type required, and that there are suitable protections in place, in case things go wrong.

Costs / third party funding issues

Whilst the cost of producing MMC components in a factory in an area of lower labour costs should be less than a traditional build locally, the additional costs such as transport, storage, site works to install the modules, finance and other professional design costs needs to be factored in.

How the components and modules are funded is key as with the modules being constructed in a factory out of the island, it will not meet the bank's requirements for drawdowns without some form of performance / bank guarantee from the supplying company. Such a guarantee will only be accepted from a reputable company.



THE ROLE OF STATES-OWNED ENTITIES

The Government of Jersey, through its States-owned entities (SOEs), is currently the largest provider of new homes in the island.

Andium Homes and JDC both play a key role in meeting our future housing needs and are in a strong position to drive forward construction sector innovation in terms of MMC, whilst supporting and growing local skills and sector capacity.

Government can use its favourable construction market position with the SOEs to pursue the best MMC outcomes for islanders, enabling the delivery of the highest build standards whilst seeking best value for money, and leveraging their capabilities to their fullest potential for Jersey.



States of Jersey Development Company (JDC) – States-owned developer

JDC have, for some years, been using MMC in the form of pre-cast elements for their developments, such as wall panels, balconies and stairs, unitised facades, light-gauge steel frames, timber frames, bathroom and utility pods and structural insulated panels (SIPS).

They have also evaluated full modular forms of construction, i.e. Category 1 - 3D volumetric structural units for apartments, to potentially establish it as a more cost-effective method than traditional build and have a view that it could resolve the capacity constraints that currently exist within the Jersey construction industry. The definitive position on the cost of traditional build versus modular, 3D volumetric builds, can only be known once JDC advances a project to tender stage with a final design.

JDC have carried out extensive research into the use of MMC and, going forward, all their future residential developments, up to Royal Institute of British Architects (RIBA) Stage 2, will be designed for both traditional; with significant elements of MMC such as pods, and also full 3D modular build. JDC will then assess at the end of the RIBA Stage 2 design process the best build method taking into account cost, quality, speed, longevity and sustainability.

Whilst companies who supply modular units exist all over Europe and beyond, there are different building regulations and standards across the many jurisdictions where this type of construction is delivered. It is also worth noting that Jersey has specific conditions – such as a higher wind driven rain index rating than much of the UK and Europe – that will affect the suitability of standardised construction. This means it cannot be automatically assumed that a given product will be suitable or deliverable in Jersey. However, modular companies who have delivered schemes in the UK, thereby meeting UK building regulations, are generally expected to be able to meet Jersey's building bye-laws, which are similar.

In their discussions with mortgage lenders, JDC have obtained confirmation from Lloyds, HSBC and NatWest that they will be willing to provide mortgages to purchasers of modular units, subject to the appropriate certifications. JDC will be advancing talks with other mortgage providers, helping to ensure that when schemes are developed, prospective owners have the greatest choice of mortgage products available to them.

Logistical issues have also been investigated and discussed with the modular manufacturers and local haulage companies, to ensure that delivering modules to JDC's sites at both South Hill and the Waterfront will be feasible.

JDC has been pro-actively researching various MMC factories, suppliers and products in Poland, Latvia, France, Jersey and the UK. There are different types of modular units and each factory production method differs. As JDC's developments are in the main, over 6 storeys and have specific requirements on design, green roofs, basement parking, commercial ground floors etc, it significantly limits the number of suppliers who can viability supply for their projects. They are nevertheless confident that suitable suppliers and products are available and can be used in the future.





Andium Homes Limited – States-owned affordable housing provider

Like JDC, Andium Homes have been researching and trialling various types of MMC for several years. Their instigation was triggered due to the rising costs of construction and the associated delivery timescale in Jersey.

Andium Homes have trialled the use of a number of Category 2 and 3 modular build techniques.

Structural insulated panels (SIPS), which offers an alternative to traditional methods such as brick and block external wall construction, has become one of the most popular Modern methods of construction in the UK recent years. This build method provides a reduced overall project duration and subsequently allows for early completion and occupation of new homes.

In addition to SIPS, a number of other MMC products have been considered by Andium, including the use of off-site fabrication e.g., bathroom pods (pre-assembled bathrooms including all fittings), Insulated Concrete Form (ICF) and Light Gauge Steel Frame (LGSF).

ICF is a new design method for Jersey and involves in-situ concrete walls constructed between two skins of insulation board, at a much faster pace than traditional construction. This achieves a much-reduced overall construction programme when compared with traditional alternatives.

Andium undertook research into light gauge steel frame (LGSF) construction, with the system being used on their Plaisant Place scheme, where they worked with their design team and main contractor to incorporate the Hadley Steel Frame (LGSF) system. This was supplied locally via Normans Ltd and uses light gauge steel frame and other components, imported in their raw state, which were then assembled into large panels on-island (at Normans Five Oaks depot). The panels were then transported and erected on site, achieving a 30% reduction in project completion, faster than traditional construction methods. Properties with repetitive floor layouts lend themselves easily to the LGSF method of construction. This development secured work for the local construction industry and an opportunity to upskill the involved workforce.

The Limes redevelopment will adopt the LGSF build method on a much larger scale, with the delivery of 125 new apartments. The scheme is being built by a local contractor and the tender package offered the best overall solution for the project, in terms of programme duration, cost and quality. It also includes the use of bathroom pods.

Andium Homes is also investigating opportunities to trial 3D Volumetric modular construction, and whilst volumetric solutions have not previously proven viable for Andium, with a development programme of 3,000 new homes by 2030 there is scope to trial various MMC build methods, where these are ready to be mobilised in Jersey.

Andium completed MMC projects

Project:	Accommodation:	ММС Туре:	Year Completed:
Le Squez Phase 3	4 x 2Bed Houses	SIPS	2016
Walter Benest Court	9 x 3Bed Houses	SIPS	2016
Samares Nurseries	20 x 1Bed & 89 x 2Bed Apartments and 91 x 3bed Houses	Timber Frame (open panel)	P1 – 2019, P2 – 2020, P3 – 2020, P4 – 2021
Rosemount Mews	2 x 3Bed Houses	ICF	2020
Springfield Mews	5 x 3Bed Houses	ICF	2020
Plaisant Place	18 x 1Bed & 3 x 2Bed Apartments	Hadley Steel Frame (LGSF)	2021
Pine Ridge	3Bed Bespoke home for specific health needs	ICF	2021
Le Clos Couriard	7 no. 3 Bed Houses	Porotherm Blocks	2022

Current / future MMC projects:

Project:	Accommodation:	MMC Type:	Completion Due:
The Limes	125 new apartments	Hadley Steel Frame (LGSF)	2024
Northern Quarter	169 new apartments	Sigmat (LGSF)	2026

Andium projects beyond those identified will continue to explore continued MMC opportunities, as those schemes come forward into the design and delivery stages.



GOVERNMENT SUPPORT FOR MMC

It is clear that construction sector innovation is already taking place in Jersey, and many forms of MMC are already being utilised to make housing delivery faster and more efficient. The focus for any additional support from Government must, therefore, be centred on where support is felt to be needed most, and where this can have a positive impact on housing delivery, in alignment with other Government priorities.

As identified earlier in this report, it is felt that MMC categories 1 and 2 (pre-manufactured 3D volumetric structural systems and 2D primary structural systems) are options that are least used in Jersey and which can provide the most potential in offering the faster route for housing delivery. To help 3D volumetric MMC to play a role in the provision of housing in the near-term, there are actions that Government can and will take.

These actions require support from key ministers who can play an active enabling role within their areas of responsibility, and which can only be possible through collaboration and open dialogue with sector experts and, the responsiveness of key partners. A partnership approach for construction sector innovation, championed by the Minister for Housing and Communities with the support of key ministers, can deliver:

- 1. The creation of a construction sector innovation hub, involving representation from the local development industry such as the Jersey Construction Council, suppliers, planning and building regulation officers, States'-owned entities including Ports of Jersey and local banks and lenders, to share ideas and challenges, identify skills and labour gaps, and discuss regulatory challenges and how they may be overcome.
- 2. Strengthened presence of States'-owned entities to lead and support the island's local construction sector in testing new-to-Jersey methods of construction.
- 3. Improve logistics and ports capacity, working with the Ports of Jersey to ensure that harbour regeneration works includes sufficient capacity for the import of MMC building supplies, including 3D volumetric modular units.
- 4. Advice and support for developers, to help address logistical challenges for modular movements and wider MMC initiatives
- 5. An advisory service for product and design compatibility with local planning and building regulations.

Ministerial commitments

Intervention	Commitments	
Ministerial Partnership	The Council of Ministers will convene a Ministerial Partnership, to champion the change needed to adopt more MMC in Jersey, recognising its importance for: - Housing delivery - Skills and labour capacity - Logistics and delivery capacity - Flexibility of planning and building requirements - Meeting carbon neutral objectives	

Construction sector innovation hub	The Ministerial Partnership will create a construction sector innovation hub, involving representation from the local development industry, suppliers, planning and building regulation officers, States'-owned entities including Ports of Jersey and local banks and lenders, to share ideas and challenges, identify skills and labour gaps, and discuss regulatory challenges and how they may be overcome.
Strengthen the role of States' owned Entities	Ministers will work in collaboration with States-owned entities, to support them in expanding their use of MMC in their delivery programmes, running pilot projects on new-to-Jersey methods of construction and growing on-island skills and capacity to support wider industry development. This will include considering coordinated construction programmes, to create efficiencies through both scale and a standardised building typology, which is to be customised to suit Jersey's architectural vernacular.
Improve logistics and ports capacity	Logistics and ports capacity will be improved, working with the Ports of Jersey to ensure that harbour regeneration will create additional capacity for the import of MMC building supplies, including 3D volumetric modular units.
Logistical advice and support for developers	Advice and support will be provided to developers where there are identified road network and capacity challenges to deliver certain forms of MMC on a given site, assisting them in evaluating permitted vehicle dimensions and the ability for road closures, including during weekends and night hours with the appropriate permissions.
Development advisory service	A development advisory service for product and design compatibility with local planning and building regulations will be available. The regulation directorate will be responsive and flexible to assist in the certification of new construction methods, where these are of an appropriate standard and design for use in Jersey. This will include undertaking reviews of published building bye-laws and technical guidance, and supplementary planning guidance, where appropriate.