

Supply Chain School – Meet the buyer

Modern Methods of Construction (MMC Workshop)

August 2023

Collaboration between NH and its partners –
Working together to change and showcase Modern Methods of highways
Construction in our sector

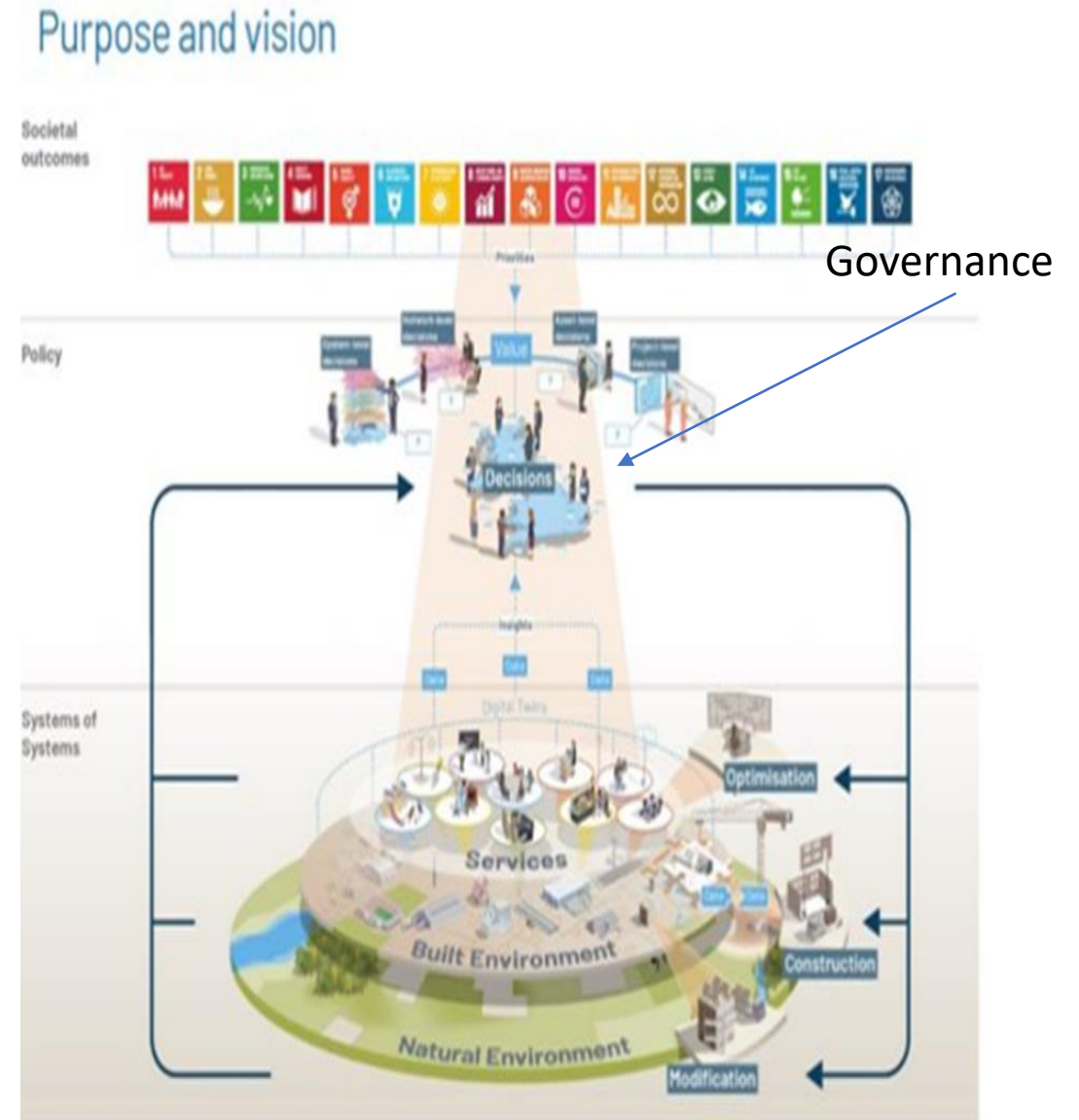
MODERN METHODS OF CONSTRUCTION

	Introductions	Timing	Lead
1	Introduction	5	David
2	Context : UK Government's approaches to MMC <ul style="list-style-type: none"> • Playbook • The opportunity for highways • Direction of travel - What does MMC mean for our sector? 	10	Manjit
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UK Government Direction The Construction Playbook

- “Different MMC solutions and platform approaches will require different contracting models and ways of thinking. Traditional contracts have developed in a manner that suits traditional methods of construction, where every element of that project is developed incrementally. Design continues to evolve at relatively late stages of the project, including after construction has commenced. MMC and platform approaches require product-led thinking, an increased fixity of design and earlier decision-making associated with meeting the Clients outcomes ”
- The government has described a platform approach as “an approach leveraging a kit of parts that are standardised and rationalised, alongside complementary components via defined interfaces, delivered via defined processes”, which “ultimately provides greater assurance around quality, value for money and a supply chain’s ability to invest in innovation and improvement as a result of greater predictability and volumes”.

Examples: modular construction, prefabrication, 3D printing, BIM, technological advances.....innovations



What does MMC mean to us? - creating a definition for highways

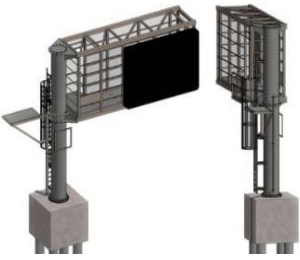






Generic definition:

- Modern methods of construction (MMC) refer to innovative and efficient construction techniques and processes that aim to improve productivity, sustainability, and quality in the construction industry. These methods involve the use of off-site manufacturing, digital technologies, and advanced materials to streamline the construction process and reduce on site work.
- <https://youtu.be/UoRQ2mynWJM>

We are co-creating the definition for Modern Methods of highways Construction (MMhC)?

Modern Methods of highways Construction (MMhC)

Seven category definition framework – Proposal

Category 1	Category 2	Category 3	Category 4	Category 5	Category 6	Category 7
Pre-Manufacturing 3D primary structural systems	Pre-Manufacturing 2D primary structural systems	Pre-manufactured Components	Additive Manufacturing (Structural and Non-Structural)	Pre- manufacturing assembly	Traditional building product site led labour reduction / productivity improvements	Site led process labour reduction productivity and assurance improvements
						
MS4 Standardised Gantry	2 Bridge Span Components	Pre-fab Slot Drain	Slipform Concrete Barrier	Underground Utilities	V Ditch Bucket	Drone Surveys
Complete modular 3D units Factory produced and transported to site for final installation.	2D units produced in factory conditions. When assembled create complete structures / assets	Standardised and mass engineered components that can be assembled and connected together (Pre-cast)	Components formed to a specific digital design / mould including remote or site-based printing of parts	Non-structural items and components bought together that when assembled make an asset	Building products manufactured for easy on-site assembly. Error proof designed tools / components	Site led process improvements using innovative- oriented solutions

Offsite Industrial / Automated Manufacturing

Onsite Construction

1. How can you support NH on our journey?

2. How can suppliers and NH work differently?

Use the chat function to add your thoughts and considerations

5 minutes

Skanska – MMC sharing approach to adoption.

Digital Rehearsals

Adam Steele

Where can you find more information?

David Emery

Thank you for your contributions

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If you have any suggestions for how we can adopt MMC please drop us a line.

Reminder: Case Studies are needed against each of the categories

END