

# Isle of Man – Engineered to fit

## Background

In 2007, the Department of Infrastructure (DOI) of the Isle of Man Government carried out a thorough review of available asset management systems. BMX was selected to replace their existing, rather antiquated, spreadsheet-based records for around 400 bridges and retaining walls.

Quickly realising how adaptable BMX was, other assets, such as the harbour structures, were added to the BMX system and the ways of using the data were extended.

When BMX was upgraded to AMX (DOI migrated in 2014) there was an even greater step change. Assets on the system now include historic arched bridges to gas jetty fire suppression systems, linkspans to lighthouses, marine breakwaters to signal-controlled railway crossings. Working closely with AMX Solutions, DOI engineers have continued to develop and expand their AMX database and asset management system to meet their varied and changing requirements.

## How AMX is used?

As well as a structural inventory and record-keeping, AMX is used, day-to-day, for condition monitoring (by routine and reactive inspections) and for arranging maintenance work. Different work teams can be tasked quickly and efficiently using tailored views and filters. The structures team can produce standard or one-off reports both to manage daily business and to underpin management planning (e.g. with regular monthly reports for divisional meetings).

Condition monitoring is a handy tool for busy managers, but it also informs longer-term maintenance planning. The team need to use both standard indices (UK standards are used) and those with modified weightings and calculations, for structures other than highway bridges and walls. This may be to cope with, say, wave effects or critical SCADA components and it allows cross-discipline comparisons and prioritisations to be made. The flexibility and customisability of AMX comes into its own here, by taking standard models and adjusting their specifications to reflect different characteristics or risk indicators without the need for lengthy 3rd party development input.



**“The best feature of AMX is its flexibility. We can record data and calculate fields in the way we want, manage our risks, plan our routine works and major projects, make evidence based bids for maintenance budgets and capital funding and keep the politicians and the public informed**

**Customisation is easy – you can really adapt it to fit your organisation’s needs.”**

**Paul Salmon, Asset Manager  
for Highway, Harbour  
& Coastal Structures,  
Department of Infrastructure,  
Isle of Man**

Planning for larger maintenance jobs and improvement and renewal work requires not only condition monitoring and structural review but also a variety of other risk review processes. Using techniques learned on AMX advanced user courses combined with a responsive technical support team at AMX Solutions it is possible for the DOI engineers to add the new forms and calculation processes into the Isle of Man AMX database.

Recently the DOI team have been developing the use of the AMX Projects facility to manage its portfolio of project programmes. This covers the spectrum from small internal jobs to major projects using external project managers (and programming tools) and which follow the government's capital procedures. There are challenges and at all levels the focus is on project definition and governance, risk and change management and costs.

Tasked by the Minister for Infrastructure with sharing information with the public, condition indices and the latest inspection date for each bridge are now published on the government website mapping. Currently the data is exported from AMX on a periodic basis by a team member. The team are in the process of automating this data export (with some control measures) to reduce the burden on staff. This automation process will also be used to share up-to-date "no-dig" map polygons with utility companies and the like.

### Benefits of AMX

The key to AMX's success for the Isle of Man is its flexibility. The advanced customisation functions enable the user to completely tailor the data held, the classification, processing and management of that data and the resulting management reports and other output to meet the Isle of Man Government's unique business processes, operational patterns, statutory requirements and financial constraints.



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by Joseph Mischysnyn geograph.org.uk/p/1683669

To arrange a demonstration of AMX and find out how it can benefit your organisation, contact us on 0333 456 0768 or email [info@amxsolutions.co.uk](mailto:info@amxsolutions.co.uk).