DMRB and Departures Update

Tom Bartley, WSP

on behalf of Steve Davy, Technical Assurance and Governance Group

Agenda

- Future DMRB Project
  - Reminder of objectives
  - Update on progress
  - What to expect in the coming months
  - Role of Principal Designer in new DMRB

- Departures and DAS refresh
  - Overview of objectives
  - Briefing on the changes
  - Preview of DAS 3.0
  - Role of Principal Designer in Departures
  - DAS 3.0 rollout schedule, comms and training plan

Future DMRB Project Update

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Future DMRB Project - Objectives

- License requirement of Highways England to review DMRB within first Roads Period (i.e. by April 2020)

- Wholesale review of structure and content of the DMRB to develop a more user-oriented suite that and will remain up to date, by:
  - Removing ambiguity, particularly on the distinction between requirements and advice
  - Removing obsolete content
  - Reducing the volume of advice
  - Future proofing the content to unlock the potential of digital innovations, including BIM and online publishing
  - Making future updates more straightforward

The future DMRB - Outputs

- Every document re-written as a “requirement and advice document” (RAD)
- New structure and document numbering scheme
- National Application Annexes to cover country-specific requirements.
- A digitally enabled DMRB that will support direct integration with software systems
- Requirements written to support innovation and reduce need for departures from standards

Future DMRB Project - Programme

- Approximately 400 documents (DMRB & IANs) to review between April 2017 and March 2020
- To date:
  - 11 document have been published
  - 34 documents have been withdrawn
  - 70% (c. 280) have reached a review, approval or publication stage
  - 23% are at a pre-review stage
- Overall status: On target
- Circa 340 publications or withdrawals by March 2020

Coming Up – this month

Ready for Publishing		
	Title	Status
GG 119	Road safety audit revision 1.0	Replaces GG 119 Road safety audit
Documents to be withdrawn:		
IAN 111/09	Managed Motorways implementation guidance - Hard shoulder running	Replaced by IAN 161
IAN 112/08	Managed Motorway Implementation Guidance - Through Junction Hard Shoulder Running	Replaced by IAN 161
IAN 177/13	Introduction of the Construction Products Regulation (EU) 305/2010	No replacement. This document and the legislation have now been in place for five years and both Highways England and the Supply Chain are sufficiently familiar with the legislation. Clauses in MCHW Series 100 are robust and would provide sufficient protection in the event of a challenge.
IAN 180/14	Guidance for the selection of remote controlled temporary traffic management signs for use on the Highways Agency trunk road and motorway network	Replaced by TR2607 & TR2608
IAN 189/16	Policy on Managing Fatigue in the Workplace	No replacement. There already exists a legal requirement, in the form of the Working Time (Amendment) Regulations 2003, for all employers including our supply chain, to manage the fatigue of their employees.
IAN 190/16	Guidance on Processes for Managing Fatigue in the Workplace	No replacement. There is an abundant amount of guidance available on the various methods that can be used to manage employee fatigue across a wide range of specific work activities.

Coming up – next three months

Document Reference	Title	Status
HD 34	Implementation & Use of the Standards Improvement System	Withdrawal - no replacement
CD 362	Enclosure of Bridges	Formally BD 67 & BA 67
CD 532	Technical Revision – Vegetated Drainage Systems for Highway Runoff	Formally HA 103/06
CD 521	Hydraulic Design of Road-Edge Surface Water Channels	Formally HA 37/17
HA 119/06	Grassed Surface Water Channels for Highway Runoff	Withdrawal – replaced by CD 521
HA 78/96	Design of Outfalls for Surface Water	Withdrawal – replaced by CD 521
HA 113/05	Combined Channel and Pipe System for Surface Water Drainage	Withdrawal – replaced by CD 521

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Coming up – late 2019

New volume structure:

		(G)	(L)	Civil Engineering (C)					Technology (T)	
		General Principles & Scheme Governance	Sustainability & Environment	Road Layout	Pavement	Structures & Bridges	Drainage	Geotechnics	Control & Communications Technology	Road Lighting
Volume		101 - 999	101 - 999	101 - 199	201 - 299	301 - 499	501 - 599	600 - 699	101 - 499	501 - 999
General Information	G									
Appraisal	A									
Design	D									
Construction	C									
Maintenance & Operation	M									
Inspection & Assessment	S									
Disposal (Z)	Z									

Impact on Principal Designers

“The future DMRB will place responsibility for design justification with the supply chain designers”

Requirements – Verb forms

Sub-category	Verbal form
Statutory requirement Mandatory requirements set out at international/European/national level	Must
Performance-based requirement These should be written as general, high level requirements: e.g. *the design of support shall prevent*…, *the gantry shall be designed such that*…, *the wall shall be constructed such that*…, etc.	Shall
Method requirement Specific (method) requirement: e.g. *the design of the support shall be undertaken using*…, etc.	Shall

Advice – Verb forms

Sub-category	Verbal form
Recommendation A recommendation indicates that, among several different options, one is recommended as particularly suitable without mentioning or excluding others. A recommendation is different from a requirement insofar as it offers the possibility to do something different from what has been recommended without asking for a departure, provided that an appropriate justification is recorded.	Should
Permissible option or approach Useful option(s) to verify the requirement or to meet the recommendation. However, the user can do something different, provided that an appropriate justification is recorded.	May
Clarification of a concept or statement of fact This is presented as either a NOTE or commentary in an annex.	Can

Impact on Principal Designers

To consider:

What is the Principal Designer’s role in design justification?

Departures Refresh 2019

Departures Refresh 2019

What's a departure?

Formal approval mechanism for works on SRN that do not comply with the standards.

Why depart:

- Value engineering
- A compliant design isn't possible / practicable
- Seeking to do something not covered by the standard (generally innovation)

Departures Refresh 2019

It is critical that departures have
a fully considered business and safety case
across the full asset life cycle

Departures Refresh 2019

The end-to-end departures process has been reviewed to:

- Reduce the end-to-end time taken to determine departures
- Improve the timeliness for submission of departures to better manage project delivery risks
- Improve quality systems to reduce the number of departures that are rejected for missing information or on quality grounds
- Improve visibility so that Highways England staff have an understanding of the forward workload for handing departures and designers can follow the progress of a departure throughout appraisal

Departures Refresh 2019

What's happening:

- Publishing a new Departures Manual that sets out the requirements and advice for an effective departures system (not published in DMRB)
- A new Departures Appraisal System (DAS 3.0) that will be easier to use and access to promote engagement and collaboration throughout the lifecycle of departures
- A series of change management activities to realise the benefits of the new approach across SES, Major Projects and Operations Directorate

Departures refresh 2019

What's changing:

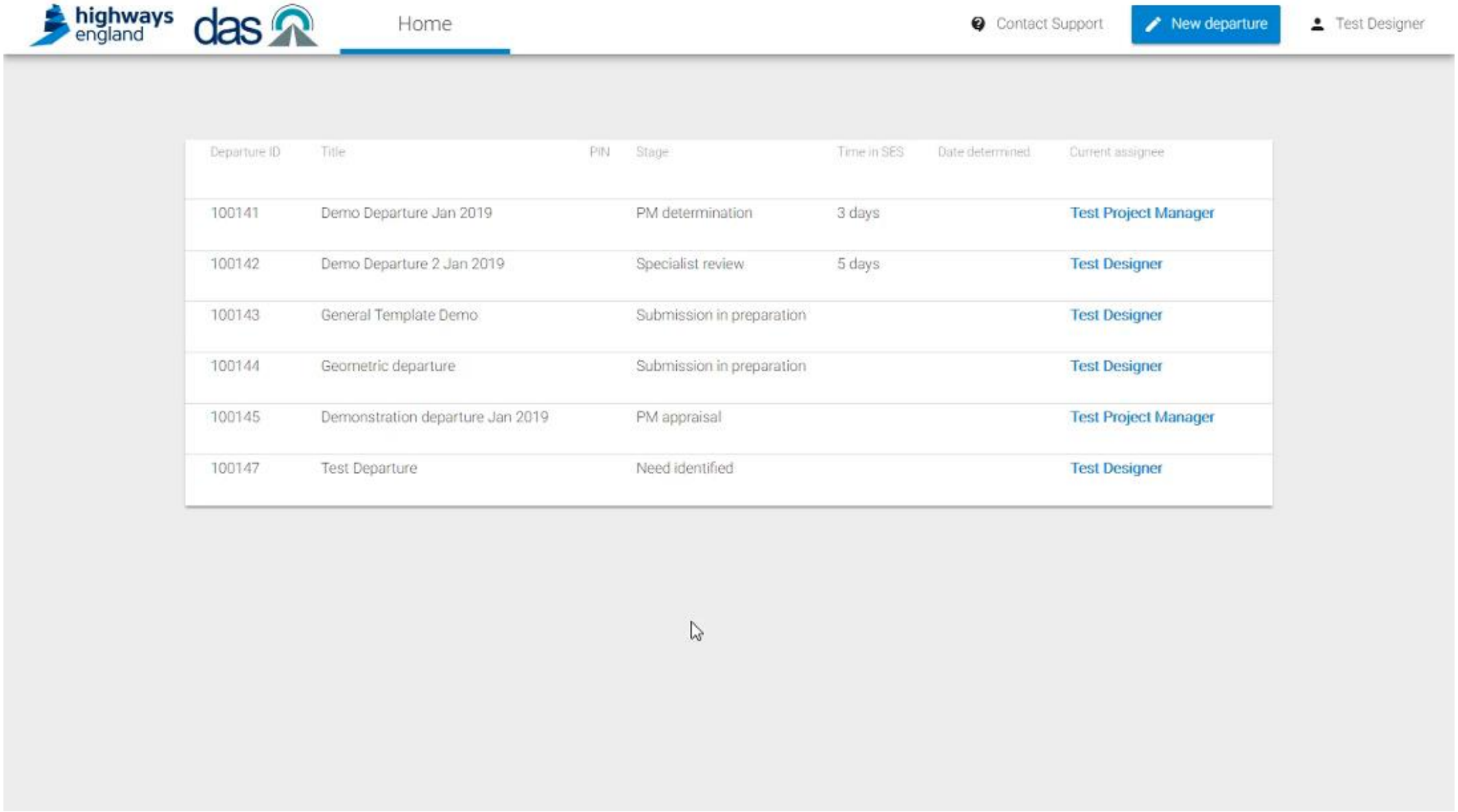
- Requirement to maintain register of all anticipated departures on a scheme within DAS throughout all project stages
- Streamlined process for Project Manager approval
- Enhanced focus on quality management in supply chain through review of the "proposer" role and clarification of rejection on quality or technical grounds
- Review of submission form to ensure submissions contain sufficient content to support appraisal, benefits management and knowledge management
- Treatment of departures at all project stages proportionately to project risk
- Permission to request and record "provisional agreement" for critical departures at an early project stage

Departures refresh 2019

webDAS and DAS are being replaced by a single cloud-based application.

Key benefits of DAS 3.0 are:

- Single application that captures the full life cycle and audit trail of a departure in one place
- Improved search for historic departures
- Ability to collaborate on a departure application between stakeholders
- Improved user accessibility that makes it easier for stakeholders to perform their role from any computer with an internet connection
- Improved reporting and visibility of upcoming departures and those in process



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Departures – Designers' responsibilities

- Submit high quality departures that support the technical specialist's appraisal
- Ensure that the life cycle impacts of a departure have been fully considered and represent a net-benefit
- Ensure safety risks are fully considered and planned for
- Support overall project risk management by handling departures in proportion to their risk to scheme delivery / benefit realisation

Departures – Proposer role

From 2019 we encourage suppliers to operate a knowledge management / technical leadership structure around departures.

Each departure is required to be submitted by a Proposer, who is experienced with submitting departures in that discipline.

For consideration:

What is the principal designer’s role in the quality management for departure submissions?

DAS 3.0 implementation programme