

UK Project Management Round Up ¹



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INTRODUCTION

After missing last month's report, there is quite a lot of Project news to pass on. I've had to be quite selective so you will need to look at the final paragraph and follow the links to get a full view of some of the smaller items.

POWER OF PM

Well, you can take this in several ways: first, PM is a powerful profession that exerts much power, often well in excess of the seniority of its practitioners. Second you could mistake PM for the Prime Minister so I usually refer to him as our illustrious leader or OIL. By far the most important aspect, though, is importance of the profession in the national economy. It's place on the world stage is becoming more widely recognized as the following examples show.

- **North Sea Link.** First up is the completion at the start of October of a three-year project that will contribute to our move to a decarbonised economy. The project is the construction of a link from Norway to UK, drawing on clean, hydro-electricity, eventually capable of transferring 1.4 gigawatts of power. This is sufficient to meet the needs of up to 750,000 homes. Naturally this comes at a cost – in this case £1.4 billion. North Sea Link can supply up to 5 per cent of the nation's households. This is the equivalent of a decent-sized power station or about 40% of the planned output of Hinkley Point C. The link runs for about 450 miles under the North Sea from a small village just outside Stavanger to Blyth in Northumberland, making it the world's longest subsea power connection. It is also the fifth interconnector produced by National Grid after previous projects with France, Belgium and the Netherlands that deliver about 5 gigawatts of electricity. The upside is that the power generation is sourced

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from hydropower plants at large reservoirs. These allow more flexible responses to increases in electricity demand than other technologies that rely on the wind blowing or the sun shining. The downside is a further coupling of the UK to the energy grids of continental Europe, thus reducing our energy security. There are macro-economic and strategic issues over here but the project has clearly been a successful engineering effort.

- **Sizewell C.** The plans for a new nuclear reactor at Sizewell on the East Coast of England have received a boost in the form of a £1.7 billion ‘set aside’ in the recent Budget to “enable a final investment decision” on the new reactor. Sounds like a very fancy model has been dreamed up by some whizzo consultancy. The rest of us make do with traditional tools like cash flow models and decision trees. Where is this in the Body of Project Management Knowledge?
- **Modular Reactors.** Continuing on the nuclear theme comes news that Rolls Royce (RR) is trying to build on the successes of its design and manufacture of reactors for the UK submarine fleet (if you can call 3 aging Tridents a fleet). RR have a long term interest in nuclear and have developed small, modular reactors that can be built more cheaply and have a smaller footprint than conventional power plants. Coming in at £2 billion a time, each reactor would cost the tenth of the giant £20 billion Hinkley Point nuclear station currently under construction in Somerset. Each reactor can produce 470 megawatts of energy, enough to meet the power needs of a million homes. The UK Government confirmed in mid-November that it had made £210 million available to Rolls-Royce Small Modular Reactor (SMR), a company majority owned by Rolls, established to develop the “low cost, low carbon” nuclear power technology. RR is investing alongside BNF Resources UK and Exelon Generation. The image below shows **Ben Wallace**, the Defence Secretary, right, alongside a model of Rolls-Royce’s proposed modular reactor



Image: Tom Bowles / Story Picture Agency

- **Experimental Reactors.** Further news of projects in the nuclear industry come from China and USA. Investigations of new coolants and less radioactive fuels are the feature of an experimental reactor in China. According to *The Times*, “If successful it could deliver safer and cheaper nuclear energy, helping the country to reduce its carbon footprint”. It will use molten salt rather than water as the coolant and its by-products are less suitable for weaponization.

GREEN PROJECTS

COP26 has been and gone so I shall not remark on progress, lack of progress or political matters but it has forced a sharper focus on Green matters. One strictly local project is the Queen’s Green Canopy project which aims to identify and protect 70 ancient woodlands and identify 70 ancient trees to mark her 70 years on the throne. It also calls for planting extensive new woodlands, deciduous as well as evergreen trees: oaks, poplars, sycamore, limes and beeches as well, if possible, as those much missed elms and ash. We are currently in the peak planting season and the Queen has already contributed (see image below).



Image: ANDREW MILLIGAN/REUTERS

Green Planes have featured in the news recently, too. I mentioned hydrogen planes from pioneering UK and US-based company ZeroAvia in a previous report. It ran the world’s first zero-emission hydrogen fuel-cell test flight in 2020, despite COVID.

Rolls Royce has just released news that its all-electric *Spirit of Innovation* has set several world records. One of these achievements is that on November 16th, the aircraft reached a top speed of 345.4 mph (555.9 km/h). It also set records for the fastest climb to 3000m and another for speed over 15 km. These records were set at RAF Boscombe Down, a research facility near my home.



Spirit of Innovation (Image: Rolls Royce)

The all electric plane is now the fastest in the world although records are yet to be ratified by the Fédération Aéronautique Internationale (FAI)

Green transport is not confined to one-off sports aircraft. **Ferrovial**, the Spanish construction giant has signed a deal with Bristol-based **Vertical Aerospace** for the design and build of 25 so called

“vertiports” around UK. The project will also allow Vertical Aerospace to launch a fleet of small battery powered vertical take-off aircraft. Vertical was set up by **Stephen Fitzpatrick**, a green energy billionaire. The plan, according to press reports, is for vertiports located near Oxford close to the M40 and Cambridge close to the M11 which would enable zero-emission sub-half hour hops to Heathrow Airport.

Virgin Atlantic has signed up as launch partner to Vertical Aerospace. The result could see the futuristic, 200mph, near-silent, four-seater VA-X4 flying taxis operating in the colours of Sir Richard Branson’s Virgin empire.



Vertical Aerospace VA-X4 air taxis
Image: VERTICAL AEROSPACE/REUTERS

And there’s more! We all know about low-emission buses which are becoming

the norm on many new bus franchises here in UK but there are also plans for low-emission trains. A lightweight train was unveiled in October at the birthplace of the industrial revolution, Ironbridge, Shropshire. **Revolution VLR** is a research and development programme co-sponsored by the rolling stock leasing company **Eversholt** and taxpayer-backed.

You may recall an earlier report (Jan 21) about reopening some the branch lines shut in the Beeching cuts in the 1960’s and it is hoped low emission trains could help in the

government's plans to reopen these lines. Following the award of a grant from the RSSB (Rail Safety & Standards Board) and new investment from **Eversholt Rail, TDI**, already leading the field in the design of 'very light rail' vehicles, brought together a consortium of key suppliers to deliver the 18m long electric(battery)-diesel, hybrid vehicle. (The lightweight body and components come in at nearly half the 40 tonnes of the country's existing fleet of conventional diesels despite being stacked up with electric batteries and a diesel range-extending engine. In this form it can carry 56 passengers at a top speed of 65mph.



The Revolution VLR can carry 56 passengers with a top speed of 65mph. (Image EVERSHOLT)

While the train is unsuitable for heavily used mainlines, Eversholt's director **Tim Burleigh** said the vehicle could be the answer to questions posed by the Department for Transport, ideally suited to lines not busy enough to sustain multiple-carriage conventional rolling stock or good for recommissioned so-called Beeching lines closed down more than 50 years ago. In future models, a hydrogen-

fuelled power system may be an option. As currently envisaged, the train can travel in zero-emission mode with battery recharging in stations. Depending on orders, the first trains could be in production by 2024 – well before the old branch lines could be re-instated.

OTHER RAIL NEWS

COP 26 has overshadowed other economic news except those that have major political implications. So, we return to ever-popular HS2, the rail project to link the North of England to the rest of the country. It may come as a surprise to many politicians but the North is still attached to the rest of the country and neatly fills the gap between the Midlands and Scotland. Nonetheless, this region feels disadvantaged and so a new, and highly expensive, high speed rail link was dreamed up. Progress has been slow. Phase 1, the London and Birmingham leg was due to open at the end of 2026. Current estimate put this opening to between 2029 and 2033

Earlier this year, Phase 2 a was approved by Act of Parliament. Phase 2a will support 5000 jobs and the infrastructure will consist of:

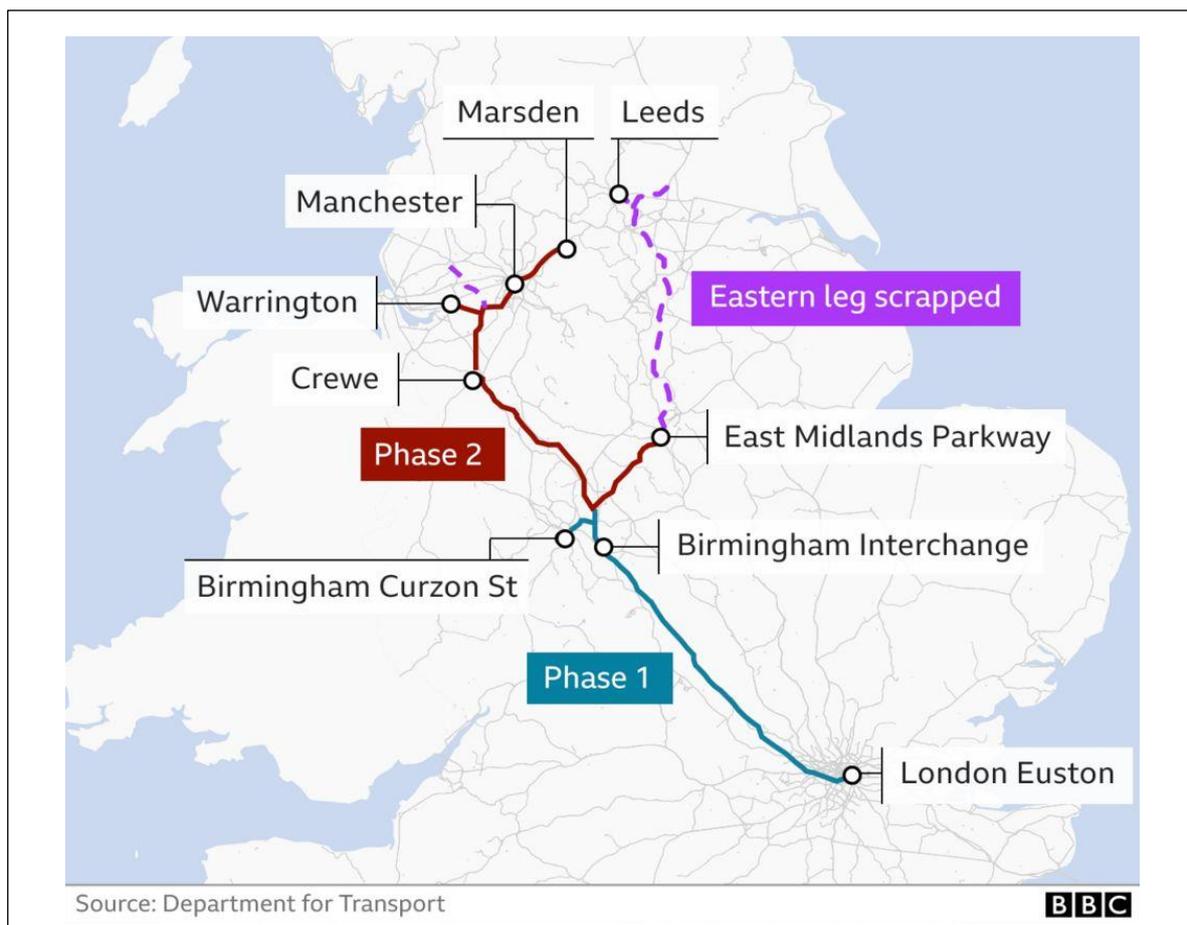
- 17 viaducts
- 65 bridges
- 36 embankments
- 26 cuttings
- 1 maintenance base
- 2 tunnels

This phase was planned to open in 2032-33, but that has now been revised and it is expected to open to 2035-2040. Current cost estimates put the price at between

£72bn and £98bn (at 2019 prices), compared with an original budget of £55.7bn in 2015 (at 2015 prices). One of the features of the past 2 years has been the almost unbelievable splashing of cash in support of COVID activity. The Chancellor of the Exchequer has been concerned about the rate of spend and further promises of government largess so it has been an open secret for weeks that the eastern leg of HS2 has been at risk. Last week the axe fell and the Integrated Rail Plan was born.

Some may recall the well-known **Three Envelope Methodology** – this replanning looks a lot like Second Envelope (Replan the project). It follows First Envelope (Blame your predecessor). There is one major issue here and that is a lack of overall leader – Allan Cook, the current Chairman, joined HS2 in December 2018. He quit in February, almost a year before the end of his three-year term. His predecessor Sir Terry Morgan was in the role for four months. The hunt to replace Cook began in April but so far no candidate has emerged. This is serious as Envelope Three (Prepare Three Envelopes) looks like it will be needed very soon. And with no predecessor there can be no First Envelope.

The implications of this new plan have been neatly summarised by the BBC in this map:



In addition to cutting the Eastern Leg, the Northern Powerhouse Rail, the new east-west line across the Pennines between Manchester and Leeds is to be downgraded. According to reports in *The Times*, instead of building an entirely new line as originally

planned, the government will upgrade existing parts of the route while building some new sections. Not surprisingly, the revised plan is causing some consternation in political circles despite promises to build three new high-speed lines in the Midlands. These new routes are:

- a 42-mile section between Birmingham and East Midlands Parkway, just south of Nottingham. This is intended to cut journey times between the two cities from 72 to 27 minutes.
- A second high-speed route from Leeds for about 23 miles, helping to cut the journey time to Sheffield from 42 to 24 minutes.
- A third stretch of about 33 miles from Crewe to Manchester, to complete the western leg of HS2.

OIL (Mr Johnson) faces a considerable backlash from members of his own party who feel some of their gains at the last election will be reversed. *The Times* reports that some 63 rail bosses wrote to Mr Johnson earlier this year saying that scaling back the line would have a “devastating impact on confidence” in the industry, which has already employed 16,000 people on the project. Who knew there were so many rail bosses!

CLOSING REMARKS

This is a difficult time of the year for turkeys, what with Thanksgiving in USA and Christmas in UK making major demands on supplies, but they are not the only phylum at risk so perhaps we should spare some sympathy for beavers. Regular readers may recall various reports of rewilding projects that are introducing beavers to places in UK that have not seen nature’s engineers for hundreds of years. Well it turns out that in



A beaver dam (image Mike Blackmore via Wild Trout Trust)

some parts of Scotland, 115 wild beavers have been killed because they were causing flooding problems by building dams in burns and ditches.

Lobby groups have called for an end to the routine shooting of the animals under the “licence to kill” system run by the government wildlife agency NatureScot. A recent ruling by Court of Session judge that NatureScot had been unlawful by not issuing written reasons for granting licences to kill beavers.

Trees for Life conservation manager **Alan McDonnell** said in response to the ruling, said: “The Scottish government must take this ruling seriously, and it means that from here on in there can be no more rubber-stamping of licensed killing of beavers. This is an important victory for accountability and transparency, which will benefit everyone including conservationists and farmers.” Some may feel his claims are somewhat overblown as the only change is that NatureScot will now issue written reasons for granting licences.

As if culling is not enough of a problem, beavers are also threatened by sewage spills. Beavers were introduced in Devon some 6 years ago by the Devon Wildlife Trust and have begun to thrive on the River Otter (I know, but it is the real location) . However, sewage being discharged weekly from a storm overflow site upstream has the potential to cause the colony of about 20 families serious health problems, wildlife experts say.

Finally, the beaver news is not all bad as we learned that 2021 has been a record year for beaver releases. Around 20 beavers will be released by the end of the year including to a project in Wales. The first of the year's releases took place in Dorset and at the end of November, a family of four Eurasian Beavers were released in Nottinghamshire, as the mammal returns to the county after a gap of 400 years. Nottinghamshire Wildlife Trust officials hope the beavers will help control scrub throughout the reserve, boosting habitat for a range of wetland birds and creating new pools to benefit everything from fish to dragonflies and otters.



There is also good news for red squirrels amongst other critters as in the small print for the recent Budget lies a £250 million fund for nature which will see the creation of 15 new National Nature reserves, and up to 8,500 hectares of new Sites of Special Scientific Interest. As ever, activists said this is nothing like what is needed. How about a little appreciation for some free money?

While climate change brings us ever closer to ecological disaster, the news is not all bad. The British Trust for Ornithology (BTO) reports that Cattle Egrets have become a resident species. They have now bred for the past three years with a record 19 pairs in 2019 of which nine were confirmed to have bred, producing at least 24 fledglings, according to a new report by the Rare Breeding Birds Panel, to which the BTO and RSPB contributed. Record numbers of common crane and great white egret also bred in 2019, with 48 and 24 pairs respectively. The BTO said their growth was probably due to better conservation in Europe, including stronger rules against hunting the birds. The protection of wetland sites in the UK was also helping to ensure that they prospered.

I was intrigued to learn that the Officials at the AIBA World Boxing Championships in Belgrade have been assessed using technology said to be superior to a lie detector test. The purpose of this testing is to eradicate corruption in the judging of bouts and comes after the sport was rocked in September by an investigation that found the integrity of the competition at the Rio Olympics in 2016 had been severely undermined by “corruption, bribery and the manipulation of sporting results”. Press reports indicate that 4 officials withdrew from the championships. The results at Rio are a major blow to a sport with many problems but AIBA have sought to overcome issues around corrupt officials using advances in Artificial Intelligence.



Prof Richard McLaren, who was responsible for exposing Russian doping irregularities, conducted the boxing investigation. The process included an “automated phone questionnaire”, using highly sophisticated technology employed by the military and law-enforcement agencies, which comprised direct questions such as “have you ever cheated in a boxing event?”. McLaren said each official was then given a “risk score, from low risk to medium risk to high risk, based on their responses”. I wonder whether this technology, suitably adapted, might be used in assessing project manager’s competence.

If you have ever wondered about some autocratic project managers, how would you feel about having Darth Vader as your boss? I am indebted to **Adam Vinning** and the Australian Institute for Project Management (AIPM) for highlighting a link in their their Open Forum Digest. The link draws attention to Darth Vader in his capacity as a project manager. Vader can be seen as a reverse accidental PM as he moved from PM to Sith Lord. **Brandon Koeller** wrote an interesting analysis of Vader’s skills as a PM in GeekWire (see link for full details - <https://www.geekwire.com/2011/top-10-reasons-darth-vader-amazing-project-manager/>)

And last but by no means least, higher education in UK is threatened. I offer as evidence a contestant on a TV quiz show who was asked the question: “In his epic poems, Homer often refers to nectar as the drink of the gods and which other substance as their food?” The response was “I know he likes doughnuts,” the contestant reasoned, referring to Homer Simpson’s love of the sweet treats. This was not the correct answer!

About the Author



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Miles Shepherd is an executive editorial advisor and international correspondent for PM World Journal in the United Kingdom. He is also managing director for MS Projects Ltd, a consulting company supporting various UK and overseas Government agencies, nuclear industry organisations and other businesses. Miles has over 30 years' experience on a variety of projects in UK, Eastern Europe and Russia. His PM experience includes defence, major IT projects, decommissioning of nuclear reactors, nuclear security, rail and business projects for the UK Government and EU. His consulting work has taken him to Japan, Taiwan, USA and Russia. Past Chair and Fellow of the Association for Project Management (APM), Miles is also past president and chair and a Fellow of the International Project Management Association (IPMA). He was, for seven years, a Director for PMI's Global Accreditation Centre and is immediate past Chair of the ISO committee developing new international standards for Project Management and for Program/Portfolio Management. He is currently Chairman of the British Standards Institute project management committee. He was involved in setting up APM's team developing guidelines for project management oversight and governance. Miles is based in Salisbury, England and can be contacted at miles.shepherd@msp-ltd.co.uk.