

UK Project Management Round Up



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INTRODUCTION

We have just passed the big local celebration here in the heart of Wessex, the historic division of England with a long-recorded history and an even longer anecdotal one. I refer, of course, to the celebration at Stonehenge of the Solstice. This is nothing to do with project management but good fun if you are into ancient rituals invented in the dark ages around 1965.



This is, as I have said many times before, the Silly Season here in UK. Traditionally, the social season is in full swing with College Balls up and down the country and major events such as Wimbledon Lawn Tennis Championships, Henley Royal Regatta and Royal Ascot to catch the attention. Interesting as these are to event managers, project managers tend to view them as poor cousins. I take a different view but will return to that theme in another edition. For now, there are plenty of items of PM interest and I want to cover some news items, a quick look at regional projects, some transport-related completed and planned projects, alternative energy developments; and some new projects before closing on a note on conservation projects that caught my eye.



Before I do all that, I want to bring to your attention the loss of another one of the “Greats” of British project management. Some of you will know **Dennis Lock**. You may not have had the good fortune to meet Dennis but like me, you may have some of his many books on your shelves. Dennis passed away in early May but I did not hear about this sad event until after our deadline last month and I do not want his passing to be missed by other friends and colleagues around the world.

Dennis was well known to other PM World Correspondents and one of his latest books was *The Handbook of Project Portfolio Management* (2018) co-edited with Reinhard Wagner. His last work seems to have been *The Practitioner Handbook of Project Controls*, with Shane Forth (2021). One of the most impressive characteristics Dennis displayed was his ability to remain totally up to date in his approach to project management, he was abreast of all the most recent developments, their strengths and weaknesses. This was reflected in his best known work, *Project Management* which was first published in 1970 and ran to 10 editions, the tenth issued in 2013 so that it remained one of the best known handbooks on our work. He wrote 6 books, co-authored another 4; edited 6 volumes and co-edited another 5 books.

Above all, Dennis was a practitioner with a career in several sectors including defence, heavy engineering and mining, with projects ranging from the manufacture of sub-miniature electronic assemblies to giant machine-tool projects and mining engineering.

A very good tribute is available on the APM website:

<https://www.apm.org.uk/news/dennis-lock-honorary-fellow-apm-1929-2023/>. A fine project manager, outstanding author and good friend who is much missed.

GOOD NEWS

Well, actually this is a pretty mixed selection but I will start with a successful medical project at University College London (UCL) where they have successfully tested a machine that mimics the functions of a liver, importantly removing harmful substances from the blood. Press reports of the trial claim that people dying of sudden liver failure, numbered in their thousands, could be saved every year after the UCL team created the first ever “liver dialysis” treatment. Full details of the trial are published in *The Journal of Hepatology* but the results of the small scale trial of 32 patients with liver disease show that the device was able to reverse acute onset liver failure in twice as many patients as those on existing treatments.

The trial was led by *Dr Banwari Agarwal*, who said: “The intervention has the potential to transform the care provided to the ever-increasing number of patients and their families suffering from the effects of living with what is essentially a terminal illness for many. It has the potential to transform the therapeutic options available to clinicians across the world for patients with acute-on-chronic liver failure.”

A larger clinical trial is planned and hoped that the device, called Dialive, could be available on the NHS within three years.

More good news, I think, as the Royal Navy completes what at first sight might seem a fairly trivial piece of navigation. HMS XV Patrick Blackett successfully navigated from the Royal Navy Dockyard, Portsmouth, to London, docking at Tower Bridge. XV, for experimental vessel, had not left sight of the coast but the important feature of the short trip was the navigation which was performed by a new system housed in a shipping container mounted on the deck. This contained a quantum accelerometer and according to reports in *The Times*, the accelerometer had, in the words of Imperial College's Dr Joseph Cotter "*very much exceeded our expectations*". Dr Cotter was prevented from further explanation by the needs of defence security but it seems that the Royal Navy's planned quantum navigation system had passed its first test.



Image: Ships Monthly/Fraser Gray

There is, sadly, some not so good news. First, we hear rumours of cost risks and now comes delay which inevitably links with further costs increases. Press reports in early June stated that EDF, the French state-controlled energy group, has warned that "the risk of additional delays and budget overruns is increasing". *The Times* reported that EDF gave no further details alongside its latest alert, which was issued within a presentation to investors in recent weeks, and a spokesman for the group declined to comment.

And now some definitely bad news! Travellers through Gatwick and other UK airports faced queues of up to four hours after a nationwide system failure with e-gates. An update of e-gates shortly before the start of the last Bank Holiday led to a malfunction that was discovered late on Friday night, as the public holiday began according to Home Office sources. This was the busiest day at British airports since before the coronavirus pandemic, with more than 3,000 flights scheduled for departure. This delay came after British Airways had to cancel more than 175 flights following an IT failure on Thursday and Friday, which affected thousands of people heading on bank holiday and half-term holidays. Apart from the technical aspects, this seems to be a clear case of a failure of risk management. Upgrades to IT systems are notoriously difficult to test and seem to be prone to glitches, some of considerable damage both economically and reputationally. Scheduling at what are predictably peak periods of use seems to court disaster.

TRANSPORT PROJECTS

First up is a good news project. Where a complicated project was completed a day early. Readers in the south of England, particularly those who needed to get to Oxford, will recall the closure of railway between Didcot and Oxford back in early April after

significant movements in the viaduct were detected due to emerging structural issues with the south bank abutment (structure that supports the bridge). The abutment was built as part of the original viaduct in 1856.



Engineers have worked around the clock to safely reopen Nuneham Viaduct, in Oxfordshire, a day early, following an intensive 10-week project. Network Rail's engineers and contractors at Balfour Beatty carried out emergency repairs. Network Rail worked with freight operators to keep

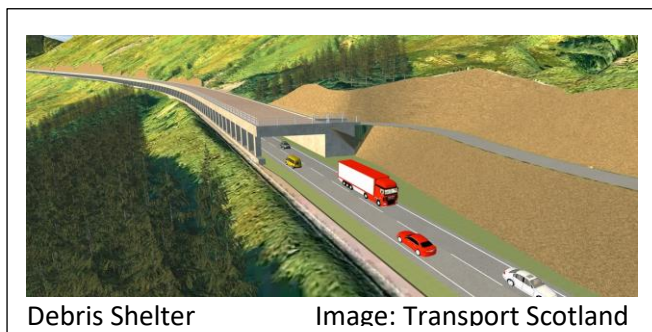
goods moving throughout by diverting trains via London. Around 800 people have worked nearly 60,000 hours, to successfully install the new steel support. The project has been complex, challenging and required some heavy engineering:

- 24 x 15m long steel piles were driven into the bed of the River Thames to create a solid platform for the temporary structure that held the weight of the viaduct while the abutment was demolished and rebuilt;
- Eight more piles were driven up to 20m into the embankment to support the new structure;
- A 750-tonne crane was used to lift the temporary structure into place;
- 4,500 tonnes of material removed from the old embankment;
- 5,500 tonnes of material brought back in to build the new embankment.

Moving from the south of England to the Highlands of Scotland, we have news of a major road project. Petrolheads will know the Rest and Be Thankful Hill climb in Glen Croe. This is very challenging competition course that has been in use since 1906 and has a number of challenges. According to my Motor Sport (August 1952 – part of my motoring library): Sadly, it has long been disused for "The three danger spots on this course which is 1,425 yards [1,303 m] long, and rises over 400 feet [120 m], are Stone Bridge, Cobblers Corner and the hairpin bend at the finish and of course there is always the occasional sheep that has to be driven off the road." More recently, (Mortar, 20 June 1970) reported: "The Rest, the famous Scottish Rest and Be Thankful Hill climb, will be used for the last time this year. Like many long established venues, time has overtaken it from the safety angle. A lot of money needs to be spent on barriers and banks and the Royal Scottish Automobile Club who run the National Open Hill Climb there say it will cost far too much; so this year it will only be used by clubs for restricted events and then no more." In September 2018 a project to establish a

Scottish Motorsport Heritage Centre at the Rest and Be Thankful was granted official charitable status.

Now, the concern is more to do with road safety along a major trunk route on the western side of Scotland where there is a good chance of traffic being hit by falling rocks. The preferred option is a debris flow shelter (See image below). It's selection follows design and assessment work on five options through the Glen Croe valley.



Minister for Transport **Kevin Stewart MSP** said:

“The Scottish Government has been working tirelessly to find a long-term solution to the landslide risks at the A83 Rest and Be Thankful.

“The identification of the preferred route option through the Glen Croe valley is a very important milestone in

finding a solution to this long-standing problem. The proposed new debris flow shelter will help protect the road and road users from future landslides.

“We want to hear from the public on our proposals and both the online exhibition and public exhibitions in two weeks are your opportunity to tell us what you think.

NEW ENERGY

➤ **Staying in Scotland**, we have further news of the offshore oil and gas industry. One of Britain's biggest North Sea oil and gas producers has stated that it wants to push ahead with significant projects, according to press reports. The Times quotes Ithaca Energy as saying it is committed to large undeveloped fields such as Rosebank and Cambo because it believed they could enhance the nation's energy security and help to lower net carbon emissions. This is all well and good, especially for the industry in Scotland where the offshore industry is a significant employer but flies in the face of electoral intentions of the Labour Party whose leader **Sir Keir Starmer** would look at stopping new oil and gas development if successful at the next general election.

Sir Keir's stance reflects the Scottish government's draft energy strategy which also has a presumption against new oil and gas exploration. However, licensing powers are reserved to Westminster. Readers will be unsurprised to learn that the stalwart environmentalist leader of His Majesty's Loyal Opposition has since recanted and is now urged to water down Labour's commitment to spend £28 billion a year on green projects by incorporating other infrastructure projects in the sum. The original commitment, made in 2021, is now seen as an “electoral deadweight”. This is project financing on a grand scale.

➤ **Space based energy** seems a dream yet we have reports that Solar energy has been harvested in space and beamed back to Earth for the first time. Reports that energy was gathered by a solar panel fixed to a satellite and was transmitted,

via microwaves, to a receiver on the satellite and to a laboratory rooftop in California. Only a tiny amount of power — 200 milliwatts — was sent but researchers believe that the results mark an important proof of principle.

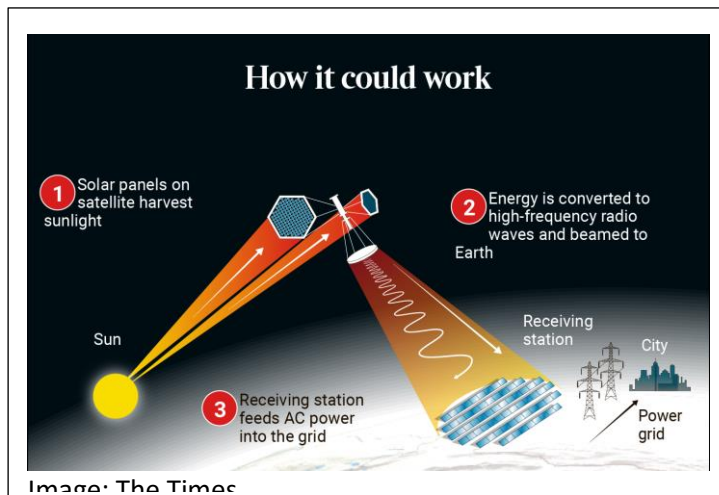


Image: The Times

The UK is one of several countries investigating the feasibility of solar power plants in space. In April the European Space Agency (ESA), of which Britain is a member, signed contracts for two studies to assess the concept. Advocates picture satellites several miles long assembled by robots in space. They could carry solar panels that would be illuminated

by the sun for more than 99 per cent of the time.

The latest experiment was carried out by researchers at the California Institute of Technology (Caltech). Research Project Leader, **Professor Ali Hajimiri** said: “Through the experiments we have run so far, we received confirmation that MAPLE [short for Microwave Array for Power-transfer Low-orbit Experiment, the name of the transmitter technology] can transmit power successfully to receivers in space.

“We have also been able to program the array to direct its energy toward Earth, which we detected here at Caltech. We had, of course, tested it on Earth, but now we know that it can survive the trip to space and operate there.”

➤ Meanwhile, **back on Earth**, the long running issue of connecting to the National Grid continues to bedevil both onshore and offshore green power generators. Some solar farms have been told they will have to wait until 2040 to be connected. It seems that solar power farms need to connect to distribution networks. Surprise, surprise, these are heavily congested. This leaves some £20 billion of solar projects are unable to connect. The response from OLIW (Our Illustrious Leader in Waiting – Sir Ker Starmer) is to throw a tantrum and rip up planning rules. Labour will rip up planning rules to speed up the construction of onshore wind farms and nuclear power plants if it wins the next election.

➤ In the meantime, **Solar investment** is on course to outshine oil according to the International Energy Agency. It expects to see \$2.8 trillion invested in energy globally in 2023, with more than \$1.7 trillion going into various clean technologies including wind, solar and nuclear generation, power networks, low-carbon heating and fuels, and energy efficiency. The remainder is expected to be invested into coal, gas and oil. The agency sees \$380 billion investment in solar this year, “edging above” that in oil production. Sounds like good news for the solar project teams.

➤ Firmly back on or **under the earth**, we learn that some 45 local authorities have been identified as having the potential for deep geothermal energy. The initial study was commissioned by our recently departed OIL (Boris Johnson) and presented the current Big Cheese (Rishi Sunak). Although not blest with the thermal activity of somewhere like Iceland, we do have a number of hot springs, of which Bath is probably the best know – it has been a source of hot water baths for the best part of 2000 years and despite rumours to the contrary, that was not the only reason why the Romans invaded.

Deep geothermal projects typically sending water down boreholes to at least 500 metres to be heated before bringing it back to the surface and used for heating. Such projects have been used to heat hoes across Europe. In Paris about 250,000 homes and the whole of Reykjavik are heated in this way. This low-carbon heat source is largely untapped in the UK, with the notable exception of a 1986 scheme in Southampton which now provides heating for the Civic Centre, 1000 residential properties, the Royal South Hampshire Hospital, Solent University and the Carnival Offices. By 2007, the system had 11 km (6.8 miles) of pipes, and was producing 40 GWh of heat, 22 GWh of electricity and 8 GWh of cooling per year. By 2014, the system provided 7 MW CHP, 2 MW of geothermal power, and MW from biomass, saving 12,000 tons CO₂ per year. There are plans to launch a geothermal project at the Eden Project – see New Projects below.

As ever, the fly in the ointment is finance. The researchers at the University of Durham found that a geothermal industry will need considerable new financial incentives, presumably from the government, akin to the “feed-in tariffs” offered in Germany.

NEW PROJECTS

➤ **Eden Project Thermal Energy.** While central government planners ponder, the private sector moves on. A new thermal energy system came into use on 20 June. This is the first such project since the Southampton project in 1987. The Eden Project, at Bodelva, near St Austell in Cornwall is a pioneering project that transformed a derelict clay mine into a beautiful global garden. It consists of a series of interlinked biomes that provide a range of environments.

The geothermal project has cost around £24 million and is funded by a grant from the European Regional Development Fund, Cornwall council and commercial investors. The cost reflected the fact that it was a research project. If the project had been purely commercial it could have been built for significantly less. It is expected to reduce energy bills at the Eden Project by about 40 per cent. More significantly, its performance will be tracked to judge the potential of an energy source that has been overlooked in the UK for decades.

Gus Grand, the chief executive of Eden Geothermal Limited, the company created for the project, said: “This is a big moment for Eden Geothermal and renewables in the

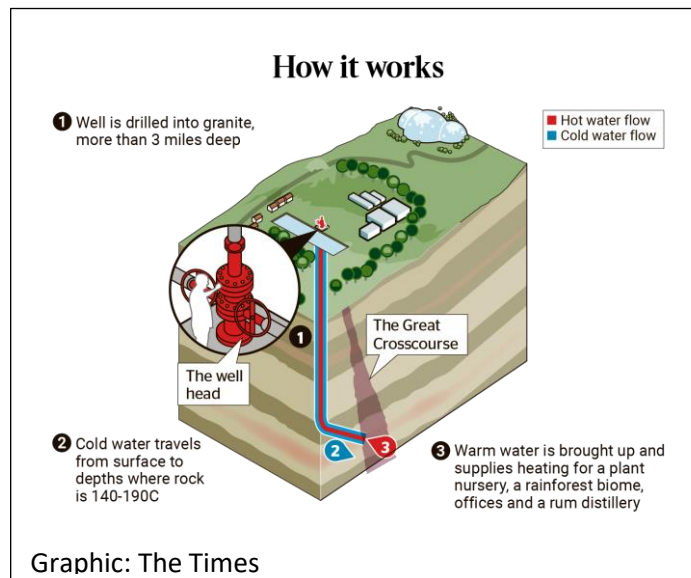
UK, but we've only just begun: in the race to decarbonise, progress has been slow for heat technologies, behind electricity and transport, but geothermal energy, with its small surface impact, can be used in urban areas and for large institutions, factories, hospitals, universities and schools. This project is a great demonstration."

Britain does not have the kind of geology as volcanically active regions such as Iceland but in some areas, such as Cornwall, there are significant areas of igneous rocks that are linked to magma and produce extra heat. To access this heat, wells must be several miles deep through particularly hard rock and so are relatively expensive to drill. The Eden Project has sunk a well into a formation known as the Great Crosscourse. At present, a single well is used.

Project results will be monitored over the coming year and should results come up to forecast, a second well will be drilled. This will allow one pipe to be used to send water down and the other to bring it up, a simpler engineering solution. This expansion should provide enough heat to supply as many as 7,000 homes.

➤ **Neutron Science.** Strictly, this is not a new project. Rather, it is major grant to the Isis neutron and muon source, which is set to receive another £90 million in to upgrade its systems and allow it to continue to probe the nature of matter **Professor Stephen Skinner**, from Imperial College London, said that infrastructure such as Isis was key to whole swathes of research. "To meet global net zero carbon targets it is essential that we develop new energy conversion and storage technologies, including electrolysis for hydrogen production, batteries for energy storage and fuel cells to provide green electricity. In order to advance these technologies innovative new materials are required."

➤ **Concorde Replacement.** The Paris Air Show has produced some unexpected project related stories of which Boom and supersonic aircraft was a new one for me. Apparently, Boom Supersonic plans to have Overture, its sustainable supersonic aircraft, in service by 2029. Such developments are almost always joint efforts so the announcement that a number of specialist aerospace companies are to support the development seems inevitable. Leonardo, the Italian aerospace group, would make part of the fuselage, and Aernnova, of Spain, would design the wings, while Aciturri, another Spanish group, had agreed to work on the tail. Boom's commercial order book stands at 130 aircraft, with orders and pre-orders from carriers such as



United Airlines, American Airlines and Japan Airlines. A military version is under consideration in collaboration with Northrop Grumman.

➤ **Electric Aircraft.** I have reported several electric aircraft projects over the last few years so the announcement at the Paris Air Show “number one provider of power and propulsion systems in [low-emission] advanced air mobility. The company is already a leader in the “air taxi” revolution, which aims to develop commercial two to six-seater electric vertical take-off and landing (evtol) aircraft. Initial indications are that it will choose to develop its electric and hybrid aerospace manufacturing in central Europe rather than the UK.

➤ **Puma Replacement.** Another story to emerge from the Paris Air Show was Airbus’ commitment to build a new helicopter factory if it wins the Ministry of Defence contract to build a new generation of helicopters. These would replace the UK’s ageing fleet of Pumas. Such a commitment would bring hundreds of new jobs and billions of pounds of exports. It faces stiff competition from Italian group Leonardo, formerly AgustaWestland, and the American multinational Lockheed Martin. The contract is thought to be worth about £1.1 billion to build at least 25 Puma replacements. Leonardo could build its AW149 helicopter at its Yeovil plant. Lockheed Martin is offering its Black Hawk helicopter, a mainstay of the American military, but it has made no commitment to assemble them in the UK.

CLOSING REMARKS

I have two success stories to conclude this month’s report but before I get to those, there are a couple of related tales to be told..

➤ **Dew Ponds.** I suspect that many non-UK readers have never heard of dew ponds. They were all the rage back in neolithic times. Dew ponds are small, round ponds sited in hollows, made by digging a pit and lining it with clay. They're found in a few dry, hilly places, like the South Downs, where there's no water running down the hillsides. This is because the rock underneath the surface, mostly chalk, is full of small openings and water drains away underground. A £1 million fundraising campaign has been launched to bring “amazing” dew ponds back to the South Downs landscape to create breeding grounds for frogs, toads, newts. This is intended to launch a series of restoration projects. It is planned to restore about 100 dew ponds across the South Downs in Hampshire and Sussex. I helped restore a dew pond near Stonehenge back in the dark ages but we saw no newts.



Smooth Newt Image. The Wildlife Trusts

➤ **More Newts.** While on the topic of newts, it needs to be said that they are not the project manager’s best friend as the presence of such a critter on a construction site will halt work. Thus, it is important to find said critters before work commences and this is not easy as they are small, dark in colour and

seriously elusive. So the good news is that two spaniels have become the first dogs trained to sniff out great crested newts, a skill that promises to reduce expensive delays to building projects. The amphibians are protected, which means that developers must employ experts to search a site for them, so that the newts can be moved before construction starts. This laborious process costs time and money.



Freya detected great crested newts up to 20cm underground
Image: The Times/Nick Upton

➤ **Success Story 1.** *Aporia crataegi*, a black-veined white butterfly with a wing span of about 7cm, was wiped out in Britain by 1925 because of changes in land usage and several years of wet and cold autumn weather. Winston Churchill tried to bring them back to Britain in the 1940s when he bred them at his country home was ultimately unsuccessful. The good news is that they have been spotted again in south east London. While the species remains common in the warmer climates in Europe and north Africa, attempts to reintroduce it to the UK have failed. It is, perhaps a measure of global warming that they seem to have been able to survive. Conservation charity Butterfly Conservation tempered expectations, however, saying that in this case it believed the insects were probably released by an enthusiast.

➤ **Success Story 2.** Poets, musicians and jazz performers have been influenced by its song and few British birds have inspired as much artistry as the skylark. In decline, like so many farmland birds, the Skylark population has caused serious concern for many years. However, The latest breeding bird survey (BBS) by the British Trust for Ornithology (BTO) found that the skylark's numbers had surged 10 per cent in the past five years, and 9 per cent in a decade. In some areas, such as the east Midlands and southeast England, their numbers are up nearly 20 per cent. Welcome as these numbers are, it is too early to tell if changing farming practices are the reason behind them. These practices include leaving grass strips around fields and even empty "skylark plots" in the middle of fields, which are both areas where the birds can

nest. Let's hope farmers continue to make spaces available and the numbers continue to rise.

Finally, a plea in the press that I can fully endorse. Jake Fiennes, brother of the actors Ralph and Joseph, has made a plea to revive the skills of shepherding. Jake feels that sheep have had a bad press. The arguments raised by some environmentalist is reminiscent of attitudes during the range wars in western USA after the Civil War! So let's hear it for the Shepherds!

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@misp-ltd.co.uk.