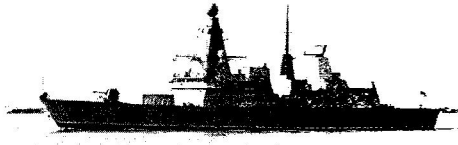


# IN THE BACK



TYPE 45 DESTROYERS



## Costly flotation

**I**F THE current stand-off with Russia leads to actual sabre-rattling, in what state is the UK's sabre? Er, not so sharp.

The Ministry of Defence's announcement that Type 45 destroyers will undergo a "power improvement project" suggests a reasonable upgrade that often happens to complex military equipment. But the work isn't scheduled to start until 2021; and it masks a more serious, long-term and expensive equipment failure in all six vessels, which cost taxpayers about £6bn (*Eyes passim*).

There have been main engine problems on all six ships, so the two diesel auxiliary engines on each ship are being removed and three larger diesel engines installed. The work, which will cost £160m, will be carried out by a team led by BAE Systems, the main contractor in the destroyers' construction.

Power on the Type 45s is provided by two different engine systems: two Rolls-Royce WR-21 gas turbines and two diesel generators. The power provided by the gas turbines is turned into electrical power to drive the advanced integrated electrical propulsion unit, which drives the ship's propellers. Technical issues with this system have resulted in several ships suffering main engine failure at sea.

The Royal Navy has said all Type 45s managed to return to their home base of Portsmouth under their own power. This is true: but they have had to make maximum use of their auxiliary diesel generators and returned at a much slower speed, and have conserved electrical power on board so as to not overload the diesel generators. Installing a third diesel engine is a pragmatic if inelegant solution. In the meantime, Royal Navy engineers have a series of work-arounds to manage the power challenges that gas turbines can have when operating in high-temperature environments such as the Gulf.

So far BAE Systems has refused to fund any of the rectification work, saying the Type 45 was produced to the specification required. There is plenty of blame to share out: the navy didn't identify the engine problems when the ships underwent sea trials, and once the problem was identified, the remaining ships coming into service weren't subjected to more stringent trials. BAE Systems and Rolls-Royce did not collaborate enough with the navy in the design phase to address the well-known engineering challenges of working with gas turbines in a hot environment.

The problems could affect the deployment of HMS *Queen Elizabeth* to South East Asia in 2021/22. The Type 45 destroyers are an integral part of the new aircraft carrier's layered defence, and there must be concerns over whether the Type 45s will be able to support the deployment, billed as a demonstration of UK engineering and naval power.

The MoD often criticises the Treasury for its low opinion of MoD project management, cost overruns and badly written contracts. But the Treasury does have a point.

CRAPITA

## Outsource of the trouble...

**D**OCUMENTS from inside troubled outsourcer Capita, seen by the *Eye*, suggest the company's nickname might if anything be too kind.

A review of Capita's professional services division reveals significant and potentially dangerous failings in some key operations. Most alarming perhaps is the dismal performance of its Security Watchdog vetting service. This provides criminal records and "disclosure and barring" checks for 1,000 clients, vetting around 1m proposed employees every year on behalf of major corporations and public bodies, including NHS trusts and schools.

Such contracts are governed by "service level agreements", against which reported performance can be described only as, ahem, piss-poor. For some, such as Worldpay (which handles trillions of pounds in transactions annually and presumably needs honest staff) "attainment" of the agreed standards was just 29 percent. The average for the top 26 clients for which there was data was just 64 percent – well below target.

The feedback from clients included "lack of trust", "files being closed when checks not completed", "not enough screening activity, process not being followed", "multiple errors being made by screening team" and repeated gripes about delays and unanswered queries. Worryingly for taxpayers and businesses in London whose billions it is spending, MTR Crossrail reported "2 percent [service level] attainment and 50.9 average days to complete [screenings]".

One Capita director noted particular problems with identity verification: "Clients (including BMI [*healthcare*] and [*other parts of*] Capita) have been identified as failing to comply with DBS [*Disclosure & Barring Service*] Responsible Organisation ID Guidance by failing to have ID documents verified". As the Capita empire spans any number of sensitive areas from criminal justice to health and defence, this is more than a little alarming.

Meanwhile, the same director said that a recent audit of Capita's "crim checks" by the government's Disclosure & Barring Service "enabled me to identify that in the vast majority of cases the level of check could

not be evidenced and in many cases was not correct". Such failures "will result in the DBS considering suspension or cancellation of our registration to use the DBS service".

With the company acting for healthcare and education providers, as well as banks and other corporations such as BAE Systems, routinely applying the wrong checks might be thought an outright disqualification for job. Betraying another symptom of terminal decline, a Capita commercial manager presenting a review of the group in December reported a rapid turnover in directors and senior personnel, leading to a "loss of tremendous corporate knowledge".

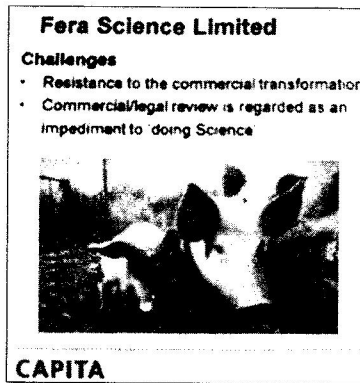
Equally troubling was a report from a director of Capita's science division of an incident at its Fera Science branch, formerly the Food and Environment Research Agency, 75 percent-privatised in 2015 by the

coalition government's environment secretary, Liz Truss. Fera's aim is "to protect the global community from biological and chemical risks" – which is not quite what happened in a hitherto unreported incident in Suffolk last year, when contaminated shrimps were mistakenly reported as safe.

A commercial and legal review in September recorded that "290 cases left the port for distribution". The result was "unlikely to be more than isolated 'food poisoning' but

the toxin residue identifies that a prohibited substance has been used..." The "immediate risk to Capita/Fera is reputational..." At the Capita management review in December, Fera's commercial director (also since departed) noted that the main "challenge" for the company was "resistance to the commercial transformation", presumably from privatised scientific staff.

Against all this, two months ago new Capita chief executive Jon Lewis announced drastic write-offs and a major fundraising effort. The company's share price halved. He didn't say that what is going on within his company shows that outsourcing services to a sprawling conglomerate like Capita, far from improving efficiency, merely adds another layer of expensive incompetence. A model that's had its day, perhaps?



CAPITA

A pig's ear: Capita's privatised food safety company

### Fera Science Limited

#### Challenges

- Resistance to the commercial transformation
- Commercial/legal review is regarded as an impediment to doing Science



GOOD NEWS 1

## Southern discomfort

**O**N THE eve of a public abstraction inquiry, Southern Water has reached a last-minute deal with the Environment Agency (EA) over pumping water from Hampshire's struggling chalk streams.

The firm had refused to accept the EA's new limits on how much water it could draw from the rivers Test and Itchen under normal conditions (*Eye* 1463). But on the day the inquiry was due to begin, Southern Water yielded and agreed to the limits – but with conditions. The EA says that so long as the water company does the environmental monitoring and mitigation work it has

promised, the agency will give permission for emergency abstraction if a drought order or other major incident causes a water shortage.

The agreement was broadly welcomed by environment campaigners, but the Hampshire branch of the Campaign to Protect Rural England warned that over-reliance on rivers for water supply in south-east England was still causing permanent damage to rivers. Government advisory body Natural England supported the settlement, but told the inquiry Southern Water still urgently needed to invest in a long-term water resources scheme.