Environmental Consultancy Market Review 2015

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FEBRUARY 2015
As we scramble out of the depths of the recession we can begin to see the landscape in front of us, and while the terrain is very different from before, there are opportunities for environment professionals.

To find out more about the lay of the land ENDS sat down with key individuals from some of the UK’s top environmental consultancies to discuss the market. We also asked RPS Group to comment. The consultants were all in emphatic agreement that the market place has changed radically.

“The biggest change since 2008 is that we now have fewer, but much larger projects and they’re based around major infrastructure,” says Toby Gibbs, UK director of environmental assessment at Amec Foster Wheeler, “There used to be more small and medium sized projects which meant we had shorter order books but more sustainable project utilisation.”

The feeling that the UK market had shifted to centre around large nationally significant infrastructure projects was echoed across the group (see p4).

But despite infrastructure projects being large and long term, the associated framework contracts are not always the big wins they appear to be. In a drive for greater cost efficiency clients are slicing up projects into smaller contracts that are not always profitable.

Ian Allison, global head of climate resilience at Mott MacDonald, was asked to bid competitively for small chunks of work worth £10,000-£20,000 within a larger framework. Allison described the competition at this level as “severe”. A year later analysis performed by Mott MacDonald showed that it wasn’t worth bidding on some aspects of the contract.

Peter Marsden, executive director of operations at Jacobs, said that sometimes his consultancy simply doesn’t bid.

“We’ve got into situations where actually it doesn’t bring any value and we don’t believe that the client is applying intelligent procurement to the way in which they do business,” he says.

“The public sector has had its budgets cut. They think they’re delivering better value, but actually they never go back to review whether it is giving them better value for money.

“Public sector clients who have procured through five year framework agreements will soon get a shock when consultants refuse to take on the work at rates previously agreed during the recession,” says Andy Young, commercial director of built and natural environment for Europe at RPS Group.

“Consultants are now looking for and expecting reasonable margins to reflect the key and specialised service that is being provided”, he adds.

Unreliable energy markets

The nascent hydraulic fracturing (fracking) industry is a potential area for growth for the consultants, but so far they are underwhelmed by the developments.

“We’re letting fracking get on with itself,” says Marsden. “We feel that the market is quite hot enough without us having to diversify into an area which I think is a complete political football and is going to be fairly nasty for a while.

“The early excitement around shale gas has become very damped down,” says Young. “With oil prices at such low levels it is hard to see much impetus to developing further renewable energies or capital expenditure in exploring for shale gas. There are local, national and global politics at play in the energy market and the government must provide and stick to a long-term strategy that will encourage investment.”

Some aspects of renewables are still surrounded by such uncertainty that the consultants are beginning to turn away from it.

“The revenue is there,” says Steve Matthews, UK and Ireland commercial director for ERM, “but it is profitability is the issue for us. If it’s big enough we’ll look at and work out a volume approach. But to be honest to us as a market it’s become less important.”

Alban Forster, director at SLR, has found renewables too “stop-start in the UK”.

“One month there’s a raft of biomass schemes and a year later they’ve all been shelved by developers due to uncertainty or diminishing business viability. In offshore wind some large utility companies have divested themselves of their interests to focus on their core business and the lack of certainty in getting onshore wind schemes developed. The renewable market in the UK is busy, but it has been extremely difficult for many to deliver operational schemes due to changing policy – getting some schemes to the operational stage does at times feel like trying to ‘nail jelly to the wall’,” he says.

But the really exciting growth is in international markets. “I think we recognised UK market stagnation a long time ago,” says Adam Read, practice director of resource efficiency at Ricardo-AEA. “We’re positioning in geographies where those markets are potentially particularly ripe. The Middle East is obvious, south-east Asia, we do work in Australia, and the eastern European countries.”
Intelligent working and community acceptance

Environmental consultants would like a more intelligent approach to EIAs, better dialogue with communities and a role for social licence to operate...
Coping with big infrastructure

EIAs for large projects are a big revenue generator but the massive scale of these projects is proving a challenge for clients and consultants alike.

Last year’s autumn statement laid bare the extent of Whitehall’s current obsession with big infrastructure. The central role of infrastructure in the government’s ambitions for the UK economy also explains the parade of ministers in high-visibility jackets at grand openings.

ENDS roundtable meeting was similarly preoccupied with major infrastructure and its increasing importance to the UK’s environmental consultancy market.

The interplay between Environmental Impact Assessment (EIA) and infrastructure projects, in particular, provoked some lively exchanges and thoughtful reflections from consultants.

The sheer volume of big infrastructure projects was clearly on the mind of Mott MacDonald’s Allison.

“In the early part of the year, we were looking at HS2 Phase 1 construction, HS2 Phase 2 bill progress, Heathrow or maybe Gatwick expansion, you had the East-West mainline link and Crossrail 2 going through the books. That was challenging enough – and then the government said ‘what about roads?’ as well.”

“Road building, which was in the doldrums for most of the last five years, was suddenly given a major, a really major, lease of life.”

The unprecedented flurry of significant projects has given Mott McDonald and its clients some cause for concern. Particularly about the availability of key staff and resources for both HS2 phase 2 and Crossrail 2, given the exacting parliamentary timetable. More positively, though, this has also provided an impetus for consultancies to collaborate (see p3), as Allison explains.

“It’s the [lack of] people dealing with decisions on what the infrastructure will actually look like – there’s not that many of those around. So we took the decision to put together a consortium.”

The scale of large infrastructure projects is stretching consultancies to their limits, agrees ERM’s Matthews. “The EIA market is worth something like £200m annually in the UK, that sort of scale. If you look at three or four [major infrastructure] projects, they’re amounting to £50m. So you’re putting 25% in terms of a capacity hit in the next couple of years into the market – a market where we lack capacity.”

Matthews thinks the industry would be wise to look again at the content of EIAs and “producing stuff in a different way” – before consultancies get hit by the next wave of large projects.

“Lots of work that’s done in EIAs covers all issues. Yes, it goes through a bit of scoping and we cut things out – but essentially there’s lots of wasted effort.”

The sector needs to “grasp this huge challenge”, in Matthews’ view, by “working together to be more efficient” and embracing a “different way of doing” EIA.

EIA has expanded inextricably to match the demands of its different users, suggests Jacobs’ Marsden.

“EIA tries to satisfy at least three different audiences: it’s a decision-making support tool; it also informs technically-savvy individuals; and it’s clearly a public consultation document.

“And, of course, as the demands in all three of those areas have expanded in the 30 years since the first UK EIAs, then the complexity, the bulk, the unwieldiness of the process outputs becomes a greater challenge.”

Asme Foster Wheeler’s Gibbs suggests that EIAs end up being delivered by the lorry load because regulators often expect it – and because consultancies have very little “time to breathe” when it comes to delivering within big infrastructure projects.

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The EIA has become the catch all of everything environmental. That’s why what could be really concise and well-commu- nicated becomes an articulated lorry full of paper.

“I think sometimes the regulators expect it – which is a real problem – the industry needs to educate the regulators. The other thing on these big projects is that often we don’t have enough time to breathe, to actually set out what we really need to deliver.”

Ian Allison thinks the planning system and fear of judicial review may also have led to a loss of common sense.

“Having seen some reasonable pieces of infrastructure through public inquiry, I do honestly feel that sometimes we’re not best served by our planning process. We have clients who rightly run scared of judicial review. And I think you lose a little bit of pragmatism, collectively, about what we’re trying to achieve in this.”

This aversion to judicial review can put lawyers “well up in the food chain”, says Allison.

“That’s possibly the worst side of a lot of what we’ve talked about. I certainly don’t like to see major pieces of infrastructure, where a five-year process of planning application to public inquiry and judicial review, is led throughout by the legal team.”

Having lawyers in charge can create an ‘Alice In Wonderland’ situation, comments Peter Skinner, URS’s environmental managing director.

“We had one project where the lawyers came to us because there was a misprint. They wanted an environmental management plan, an EMP, but instead of writing EMP they wrote EMS.

“So we had to produce an EMS because it complied with the contract it was cheaper for us to do than change one letter on a contract.”

RPS’s Young said: “RPS fully coordinates and reviews all of its EIAs to ensure they are legally compliant and are able to highlight potential weaknesses or judicial review issues to the client.”

“We are seeing an increase in clients being aware of the possibility of a judicial review, an increase in clients understanding the need to minimise that risk but not an increase in legal involvement – lawyers are involved in our larger major infrastructure projects to the same degree as they have been for the last 15 years or so but are often not involved in smaller projects, where our clients rely on our advice in terms of risk.”

Fortunately, ENDS’ high-level consultants are a creative crowd and were eager to offer up their ideas on the future of EIA and how it could adapt to meet the demands of big infrastructure projects – as mentioned in the previous section (p3).
Figure 1
Selection of upcoming major UK infrastructure projects

<table>
<thead>
<tr>
<th>Project name</th>
<th>Developer</th>
<th>Environmental services</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thames Tideway tunnel</td>
<td>Thames Water</td>
<td>RSK Environment</td>
<td>Development consent granted</td>
</tr>
<tr>
<td>Rampion</td>
<td>Eon</td>
<td>RSK Environment, Royal Haskoning</td>
<td>Application expected in 2015</td>
</tr>
<tr>
<td>Galloper Wind Farm (RWE Npower/SSE)</td>
<td>Royal Haskoning</td>
<td></td>
<td>Awaiting development consent decision</td>
</tr>
<tr>
<td>Kentish Flats Extension</td>
<td>Vattenfall</td>
<td>Royal Haskoning</td>
<td>Development consent granted</td>
</tr>
<tr>
<td>Hinkley Point C nuclear power station</td>
<td>NNB Generation Company (EDF)</td>
<td></td>
<td>Development consent granted</td>
</tr>
<tr>
<td>Alex Dock biomass power station</td>
<td>RES</td>
<td></td>
<td>Project on hold</td>
</tr>
<tr>
<td>Brechfa Forest West</td>
<td>RWE Npower Renewables</td>
<td></td>
<td>Development consent granted</td>
</tr>
<tr>
<td>East Anglia zone</td>
<td>Vattenfall/Scottish Power</td>
<td>RSK Environment, Royal Haskoning</td>
<td>Development consent granted</td>
</tr>
<tr>
<td>Triton Knoll</td>
<td>RSK Environment</td>
<td>RWE Npower</td>
<td>Development consent granted</td>
</tr>
<tr>
<td>Dogger Bank</td>
<td>Forewind</td>
<td>Royal Haskoning, Vattenfall/Scottish Power, RSK Environment, Royal Haskoning</td>
<td>Development consent granted</td>
</tr>
<tr>
<td>North Killingholme power station</td>
<td>C.Gen</td>
<td>Parsons Brinckerhoff</td>
<td>Development consent granted</td>
</tr>
<tr>
<td>Galloper</td>
<td>Galloper Wind Farm (RWE Npower/SSE)</td>
<td>Royal Haskoning</td>
<td>Development consent granted</td>
</tr>
<tr>
<td>White Rose carbon capture and storage project</td>
<td>Capture Power (Alstom, Drax and BOC)</td>
<td>ERM</td>
<td>Accepted for Planning Inspectorate examination</td>
</tr>
<tr>
<td>HS2 Ltd (Department for Transport)</td>
<td>Technical lead by Arup, supported by URS Scott Wilson</td>
<td>EIA work by ERM, Temple Group, Matt McDonald, Atkins, Arup</td>
<td>Royal assent of parliamentary bill expected in 2016</td>
</tr>
<tr>
<td>Alexandra Dock biomass power station</td>
<td>RES</td>
<td></td>
<td>Project on hold</td>
</tr>
</tbody>
</table>
Environmental consultancies have moved from the margins and now play an integral role in the design of new projects

**Skilling up for the future**

Environmental consultancies are moving into the mainstream. They no longer sit at the periphery of the project design process but play a pivotal role at the centre.

RPS Group’s Young, says that environmental and consents go hand in hand and are now “well recognised as key parts of all types of planning and infrastructure projects”.

“The people required to cover these issues are now firmly ensconced as principle players alongside those responsible for the design, business case and implementation. This has come about over the past 15 years. The National Planning Policy Framework has helped to focus resources better on what is actually important to determining projects under planning and has helped weed out some work that has been unnecessary before,” he says.

This mainstreaming means that the sector needs to hire a new breed of consultants, one which can communicate across multiple disciplines and work flexibly as projects ebb and flow.

They can no longer be specialists in just one area. Now they need to be able to be fluent in many disciplines as well as competent communicators in client-facing situations.

**A new breed of consultant**

ERM’s Matthews says it is a challenge to find people that can work across practises and can also talk about business. “It’s quite a different type of consultant than we had a few years ago... if you go back to 2008 you would have people who would say: ‘I’m in contaminated land’ or ‘I’m in the power sector’”. But today this is not enough.

Amec Foster Wheeler’s Gibbs concurs: “This part of environmental consultancy has changed, it always used to be about writing very science-y reports and being very technical about it, I think we’ve woken up to the fact that actually it’s about good communication... it is more difficult to find people in the sector that can do this well”.

Gibbs says it is hard to find people who can “unpick a 300 page report” and then stand in a business environment and explain it clearly.

“They are the interface between client and the engineer and the environment team. We look for technical talent... But they have to come with business [skills],” he adds.

Gibbs calls it a “key interface role” and says he has seen the need for it build over a number of years.

RPS’s Young agrees that “more people are now needed in the business that understand, manage and co-ordinate a range of different disciplines and who are skilled in getting across what this work means to a broader range of other professionals.”

Mott MacDonald’s Allison says: “The drive for cooperation and working in consortia is a recognition that these top people who can take the science and interpret it aren’t there in sufficient numbers” (see p3).

Allison agrees that there is “far greater interaction between the engineering teams and environment teams” than he’s ever seen, because they are working together earlier in the process to ensure that the environmental impacts of a project are acceptable to avoid numerous iterations of the same design.

RPS’s Young points out that clients on major projects now expect to see environmental consultants co-located and embedded in their project teams.

“This is the new challenge and does require consultants to adapt and develop new skills. For just as engineers have become conditioned to producing value engineered solutions first time, so too are environmental professionals reacting to the financial controls and overall project goals while providing robust, scientific advice that can withstand the most rigorous scrutiny,” says Young.

**Youth and experience**

Finding the right people is a challenge but the alternative, training graduates, can be also be a time consuming and ultimately costly undertaking.

Young believes “there are some well qualified people out there, but finding enough well qualified people with the right experience is the challenge”.

Ricardo-AEA’s Read has had to take a new approach to recruitment. “We’ve stopped recruiting for a while because we were spending so much time and effort upskilling these people for them to then go on and work for somebody else because they then get given that 10-15% pay rise, because somebody else has done the schooling.

“So we’ve ended up saying well, why don’t we do what everyone else does and go and steal somebody else’s graduates? The problem is, if we all do that, is that there’s not enough schooling going on,” he says.

Marsden says Jacobs is addressing the problem by reinvigorating its graduate recruitment programme and taking on apprentices. He is pragmatic, “I think you just need to kiss a lot of frogs.”

**Flexibility and mobility**

The stalling of in some sectors of the UK market has led consultants to look to international markets in order to achieve their growth.

“There is stagnancy in the UK growth model for our business, which means you look to work more overseas, you look to work with more entrepreneurial organisations... all this talks about mobility,” says Matthews.

Staff need to be mobile and flexible if they are going to work in international markets, and that’s a “big, big challenge” he says, especially if they are going to be dropped into a project in Africa for three years.

Flexibility is required within the UK market because as projects begin, consultancies take on staff to fulfil the project and then all too often find that the project stalls, or stops altogether, and the staff need to be dropped.

Marsden says he has a lot of people on his books who only work in the summer season. “We have seventy odd ecologists in our organisation. But during the survey seasons we’ve probably got 150 people out there and that additional resource is almost exclusively on flexible, zero hours and as needs contracts.

“These arrangements suit both ourselves and the ecological resource pool, which is drawn from academia and others sectors where summer availability matches our needs.”

Forster of SLR thinks there may be a possible solution to staffing issues: “There may be an opportunity to have a consultant pool of resource that we can collectively draw upon as projects demand it. It saves that risk of staffing up a team for a project that gets delayed for six months.

“This would only work well with closer collaborative working between consultancies.”

A more skilled, mobile and flexible workforce is required for the sector to meet the upcoming challenges associated with big infrastructure projects and expansion overseas. This will be a big challenge, but an exciting one and the consultants are ready to deal with it.
Making mobility sustainable

In this consultancy case study, RPS describes how it built environmental protection into a major road scheme in South Wales

The dualling of the A465 road scheme is a central part of the ambitious Heads of the Valleys regeneration strategy developed by the Welsh government and five South Wales local authorities.

Starting in 2006, the strategy plans to tackle root causes of economic inactivity in the region by delivering long-term effective results to improve transport infrastructure and thus accessibility and boost industry, tourism and public confidence.

The plan is to dual six sections – a 40-kilometre stretch of this important route that connects Swansea and the M4 to the A40 and M50 route to the Midlands. A detailed schedule of works was set out in the Welsh government’s 2010 National Transport Plan. Sections one and four of the scheme were completed in 2008 and 2004 respectively, and section three is currently under way – scheduled to end in June 2015.

Section two of the scheme, an 8.1km stretch between the Glanboiden and Brynmaur roundabouts, with a total cost in the order of £190m, was regarded as the most environmentally challenging section of the route. It has 16 major structures, over 2km of retaining walls and excavation of more than 1.2 million m³ of material. This section runs along the edge of the South Wales Coalfield syncline.

The terrain surrounding the existing highway and proposed dual carriageway is extremely challenging for road development – with an undulating topography located in the Brecon Beacons National Park.

The surrounding landscape also incorporates several internationally and nationally designated sites of environmental (Natura 2000 and SSSIs) and heritage interest.

A predominant feature of the section is the protected Clydach Gorge which contains a number of scheduled monuments and the Mynydd Llangatwg limestone caves SSSI (protected bat roosts). The Blaenavon Industrial Landscape World Heritage Site is also close by.

Environmental challenges

To address these unique environmental challenges Costain chose RPS at the tender stage to lead the environmental design and assessment in the team presented to the Welsh government.

Following the award of the contract, RPS was tasked with the delivery of a comprehensive and sensitive environmental impact assessment and working in close consultation with Brecon Beacons National Park Authority, Natural Resources Wales and Cadw (Welsh government advisers on heritage).

RPS produced an environmental statement and, in accordance with Regulation 61 of the Conservation of Habitats and Species Regulations 2010, an Assessment of Implications for European Sites (AIES) to identify the possible impacts of the published scheme on three special areas of conservation (SAC).

Assessments

Thorough scoping of the assessments was critical to delivering the project programme. RPS’ scoping report set out specific environmental assessment methodologies and potential mitigation measures recommended for integration into the scheme design.

Baseline data was obtained by compiling and reviewing available data and undertaking baseline surveys to generate site-specific data. Where required, the methodology for the surveys was agreed with the relevant stakeholder.

RPS’ studies included cumulative impact assessments examining multiple environmental effects on single receptors and other parts of the project using a matrix-themed approach. To ensure the minimum impact was visited upon surrounding sites of major environmental and historic value, RPS designed detailed mitigation measures to provide visual screening, low noise surfacing and noise barriers, and measures to compensate for the loss of bat foraging areas and a thorough construction environmental management plan.

Particular consideration was also required where road widening was proposed above the Mynydd Llangatwg caves. Here the route would sit between five and ten metres above the cave roofs, some of which were also bat roosts, and within 100 metres of their main entrance necessitating intricate planning for exceptionally delicate piling work. The environmental statement and AIES were published alongside the draft orders in October 2013.

As a major multidisciplinary consultancy RPS was well placed to deliver the wide range of professional services, bringing together targeted expertise from a spectrum of dedicated resources.

For A465 section two we assembled a team across five of our UK offices to advise on archaeology and built heritage, air quality and climate impacts, ecology and biodiversity, landscape and visual impact issues, planning services including land use and community and leisure, health impact, habitats regulations, geology and contaminated land matters and hydrology.

RPS also used external specialists where specific species or local knowledge added value. Seven of the Welsh government’s expert witnesses at the public inquiry in 2014 were from RPS.

Having a long-standing relationship with Costain benefitted delivery of the scheme as our previous project experience with the contractor has established an effective understanding and methodology.

This was further enhanced by the co-location of the RPS environmental coordinator with the design team and contractor in Cardiff – facilitating closer familiarity with the design process and a more hands-on accessibility to discuss and resolve environmental queries and design issues.

Public inquiry

At the public inquiry in 2014 the inspector noted the proposals as acceptable and that “there was an abundance of evidence to show that the scheme would comply with local, regional and national policy for transport and the economy”.

Although “landscape and environmental policies would not all be advanced by the scheme”, both were “vigorously addressed” and demonstrated “as part of the development of the scheme, with clear strategies to make its impact acceptable”.

The strategies were noted as “essential in order to minimise the adverse impact on the Brecon Beacons National Park, in the Clydach Gorge and on the Blaenavon World Heritage Site that would otherwise occur”.

Primary construction on section two of the A465 recently started with RPS leading the environmental work including ecological site clearance, archaeological investigations, land surveys and detailed design of landscape and environmental mitigation. The works are expected to be completed in 2018.
5000 TALENTED PEOPLE
250 DIVERSE SERVICES
125 COUNTRIES
6 CONTINENTS
1 SECURE & STABLE COMPANY

Oil & Gas and other
NATURAL RESOURCES

Energy & Urban
INFRASTRUCTURE

Built & Natural
ENVIRONMENT