

## Minutes

### NIRAB Eleventh meeting

29<sup>th</sup> June 2016, 13:00-16:00

The Royal Society, London

#### Attendees:

##### MEMBERS

Dame Sue Ion	Chair		
Tim Abram	University of Manchester	Bob McKenzie (on behalf of Mick Gornall)	Springfields Ltd
Andrew Carlick	DBD Ltd	John Molyneux (on behalf of Paul Stein)	Rolls-Royce
Paul Harding	URENCO	Martin O'Brien (on behalf of Steve Cowley)	CCFE
Neil Hyatt	Sheffield University	Mike Tynan	NAMRC
Bill Lee	Imperial College	Laurence Williams	CORWM
John Lillington	AMEC Foster Wheeler	Peter Wylie	Sellafield Ltd

##### OBSERVERS

Derek Allen	Innovate UK	John Loughhead	DECC
Neil Bateman	EPSRC	David Senior	ONR
Robin Grimes	FCO		

##### OFFICIALS

Rob Arnold	DECC	Paul Hollinshead	MOD
Si Dilks	DECC	Louis LaPaz	HM Treasury
Paul Drabwell	BIS	Ajeet Jauhal	HM Treasury
Malwina Gradecka	DECC	Rupert Wilmouth	GO-Science

##### SECRETARIAT

Gordon Bryan	NIRO	Paul Nevitt	NIRO
Andrew Howarth	NIRO	Simon White	NIRO

#### Apologies:

##### MEMBERS

Richard Clegg	Lloyd's Register
Steve Cowley	CCFE
Mick Gornall	Springfields Ltd
Malcolm Joyce	Lancaster University
Andrew Sherry	NNL
Paul Stein	Rolls-Royce
Neil Thomson	EDF Energy

##### OBSERVERS

Melanie Brownridge	NDA
Tim Dafforn	BIS
Sir Mark Walport	GO-Science

## Agenda Item 1 – Welcome and Introductions

The Chair welcomed members and observers for the eleventh meeting of NIRAB. The draft minutes from the last meeting (NIRAB-110-1) were accepted. The possible implications of the recent referendum result for the UK to exit the European Union were addressed by the Chair. Early advice is that:

- 'Article 50' applies equally to Euratom - an exit from the EU also means an exit from Euratom.
- The Lisbon and Euratom treaties are inextricably linked following the consolidation process at the time the Lisbon Treaty was drafted.
- In view of the imminent preparation of the Euratom programme 2019-20 the European Atomic Energy Community would need a clear indication from Government regarding their future intentions well before the end of the two year negotiation period.

There is a need to gather information to inform subsequent negotiations.

**Action 11.1: NIRO to elicit information from members on current and anticipated engagement in European projects including:**

- **What programmes currently involve EU funding and on what timescales?**
- **What programmes are planned to involve EU funding?**
- **How many European nationals are working on research in member's institutions?**
- **Are there any strategic issues?**

**Action 11.2: NIRO to identify what elements of the recommendations / proposed programme assume EU funding and would be impacted if this was not available?**

## Agenda Item 2 – Actions from previous NIRAB meetings

The actions from the last meeting were reviewed using the NIRAB action tracker (NIRAB-24-10).

*Action 7.1 DECC to identify any outputs from the SMR TEA that flag up the need for any research on public acceptance* – The SMR TEA report is due to be completed this week and any requirements for public acceptance research will be included in the process to develop DECC's energy and innovation programme. [Action complete].

*Action 10.1 Bill Lee to lead on information gathering from academic institutions for the landscape survey* - Bill and NIRO have discussed how best to engage academic institutions, the landscape update will be covered under agenda item five. [Action complete].

*Action 10.2 Derek Allen, Mike Tynan and Melanie Brownridge to work with NIRO to simplify the question set and develop questions to elicit information on alternative technologies and the research capability in SMEs* – NIRO conducted discussions with the necessary NIRAB members on how best to simplify the question set and engage with SMEs, the output from these discussions will be discussed under agenda item five. [Action complete].

*Action 10.3 Neil Bateman to present at the next NIRAB meeting describing how the totality of NNUF SHRI expenditure aligns with NIRAB's recommendation.* To be addressed under agenda item six. [Action complete].

## Agenda Item 3 – Government Update

Government continues to progress its plans for a five year energy and innovation R&D programme with particular focus on defining years one and two. The aim is to have the programme commencing in autumn and announcements are expected in the coming months.

The first phase of the SMR competition began in March with the Government inviting expressions of interest to participate in dialogue. There have been 38 expressions of interest and 33 eligible organisations will be engaged in the dialogue process. The dialogue meetings are being used to gather information for the wider strategic plan. Dialogue will continue up until the autumn. An SMR roadmap will be developed and published in the autumn.

#### Agenda Item 4 – Prioritisation of NIRAB recommendations

A paper was presented which showed how NIRO has prioritised NIRAB's 2015 recommendations using the principles agreed with NIRAB. The prioritised programme is adapted to match an assumed level of Government spend across the next five years. Members provided comments and confirmed the logic that was used to create the programme. Subject to making the changes suggested by NIRAB, this will be considered as NIRAB's current advice to Government on civil nuclear R&D research.

**Action 11.3: Peter Wylie to work with NIRO to advise whether aqueous recycle waste management research needs to be further prioritised in order to maintain sufficient capability in light of ongoing and planned Sellafield requirements.**

Government has been in discussions with its departments and the devolved administrations regarding the UK's Boiling Water Reactor (BWR) capability. Members were asked whether BWR research needs are appropriately reflected in NIRAB's research recommendations. The board confirmed that the research recommendations were developed to build capability that could be applicable to a range of reactor types. NIRO shared a simple analysis of the applicability of the research programme recommendations to BWRs.

**Action 11.4: NIRO to share with NIRAB members the initial high level analysis of which elements of the proposed programme are relevant to BWRs.**

**Action 11.5: NIRO to convene a discussion to look at the programme in greater granularity and advise what, if any, additional research is needed to address BWR needs.**

#### Agenda Item 5 – Landscape Survey

NIRO has held discussions with Government and stakeholders to establish the aims and objectives for the 2016 civil nuclear R&D landscape survey. Based on these discussions, NIRO presented the proposed survey questions and timeline for gathering and collating responses. NIRAB provided comments on the current plan including advice on focussing the questions to ensure quality data is extracted. Government also committed to clearly state their requirements for the survey.

NIRO will collate the views of NIRAB members on progress against the nuclear industrial strategy in order to provide further qualitative analysis of progress. The quantitative survey questions will be refined further and distributed to respondents so that the final report can be prepared in time for publication with the final NIRAB report at the end of 2016.

**Action 11.6: DECC to specify the Government requirements and drivers for conducting the landscape survey.**

**Action 11.7: NIRO to prepare a paper summarising those views of members on the evolution of the R&D landscape and the implementation of the Nuclear Industrial Strategy since 2013.**

#### Agenda Item 6 – UK Initiatives Update

Updates were given on the National Nuclear Users Facility, Sir Henry Royce Institute and the Joint Research and Innovation Centre with China.

**Action 11.8: NIRO to collect the views of members on the sufficiency of the proposed NNUF investment in facilities.**

**Action 11.9: Neil Thomson to brief the board on developments with the Sir Henry Royce Institute.**

### **Agenda Item 7 – Post NIRAB Advisory Structure**

A paper was presented which details the function currently provided by NIRAB based on its terms of reference and the new requirements for a future advisory function post NIRAB. The new requirements were articulated by NIRAB members to reflect the changing landscape and the new research programme being developed by DECC. Board members agreed on the consolidated list of requirements for advice which will be given to Government.

### **Agenda Item 8 – NIRAB Plan 2016**

NIRO presented the plan for 2016, this includes the publication of the NIRAB final report and the landscape survey report by the end of 2016.

### **Agenda Item 9 – NIRAB Chair/NIRO Additional Notable Activities**

A paper containing NIRAB Chair and NIRO stakeholder meetings was distributed to the board.

### **Agenda Item 10 – AOB**

CEA and the Karlsruhe Institute of Technology have expressed an interest in the UK becoming a partner in delivering the annual Frederic Joliot and Otto Hahn Summer School on Reactor Physics. It was agreed that this is an opportunity worthy of more detailed consideration.

NIRO has been approached to facilitate the organisation of a workshop at which CEA set out the opportunities for UK organisations to engage in the ASTRID programme. The event is likely to be scheduled in early September.

### **Agenda Item 11 – Summary of Actions and Next Steps**

A summary of the actions arising from the meeting will be sent to members and observers with the draft minutes.

### **Date of Next Meeting**

The next meeting is scheduled for 4<sup>th</sup> October 2016 in London. The date of the final meeting will be 14<sup>th</sup> December 2016, also in London.