

Comments on RRAC First Annual Report

Comments on Draft#’2 (12th July 2001)

Context: My comments have of necessity sought to identify ways of improving the report and should be read within such a context (ie as constructive criticism). Personally I found the report left me rather confused with little understanding of the basis of the recommendations proposed. The suggestions below primarily address this key issue.

Top level comments:

- The report needs to *reference the current industry downturn and its impact on RA research strategy*. This downturn is having, and will have, an impact upon industry-led and industry-funded research – some reference to this is needed. The RA should be fully aware of such impacts in setting its own strategy and priorities. (Some companies are scaling back UK-based activities, both industry-funded university research contracts and in-house research).
- *More diagrams* should be included - a picture is worth a thousand words. (For example, the diagram showing the classification of the pre-existing RA research into short/medium/long term).
- The report could benefit from *inclusion of an ‘Objectives’ section* at the start -perhaps with the current section ‘Committee Structure’ as a subset of this chapter – which sets the scene as to what objectives the strategy is intended to fulfil. (Whilst arguably this is embedded in the Committee’s terms of reference, a succinct statement that brings them to the fore would be beneficial, for the reader seeking to quickly find the key points).
- Section 3 – The Issues
This section should start by *explaining the logic and rationale* by which the list of issues in this section was derived.

The issues were identified by the RRAC through a clear and logically reasoned process – an initial classification of existing research projects into long/medium/short term and type of research, followed by creation of a new taxonomy (priorities) which we felt was more appropriate to the new objectives of RA research strategy (1st comment above) and then by looking for the gaps and by brainstorming and mapping onto the new taxonomy. If this process is not described the list appears as an unconnected list of topics.

A diagram is needed summing up the mapping of the proposed topics in section 3 onto the overall taxonomy, so that the relative balance of short/medium/long term and priority areas may be seen at a glance.

- The *Executive Summary*, in particular should *present the logic and process* which the RRAC adopted in deriving its recommendations.

Specific comments:

- Introduction – p4 square brackets – the reference to RAL – I believe the only consensus on RAL was that the facility should be centrally funded, and that the current policy of reducing RA funding, by making RAL compete for funding, would jeopardise its future. We also were concerned that its current size was sub-critical mass, but that it could have potential for a wider European role. I recall conflicting views being aired in the RRAC regarding ‘the excellence of the skill base in propagation research’ at one time when this view was aired – presumably this is why this section is in square brackets ?
- RAL, RTCG – would be good to explain abbreviations first time they appear – (I don’t know what RTCG stands for !)
- p6 – mid-page – I think we mean software defined radio, not software controlled radio
- p6 – section 3.2 – It is inappropriate to single out an individual technology (smart antennas) at the start of this section – it confuses the issue of technology with the thrust of this summary, which relates to organisational and collaborative method. We should say here that the mechanisms for collaboration require further examination by the RRAC, as they do – we have not examined this issue in any detail. (Smart antennas, in any case, are mentioned later, p8)

The RRAC’s conclusion to date, I believe, has been that the RA does not have a comprehensive database of *what research is going on* in the UK and Europe even – creation of this should be the first priority, before we make a recommendation on ‘where to from here’.

(See also note on section 8 below – I wrote the next bit before looking at section 8, where these issues are better addressed)

I would thus suggest a recommendation that reads:

[The RRAC recommends that the RA create or commission the creation of a database of spectrum-relevant research activities, both industrial and academic, underway in the UK and Europe. In due course this should be expanded to further afield. The RRAC further recommends exploration of mechanisms for increased research collaboration with external bodies, both within and outside the UK, including activities related to spectrum efficiency.]

- p7 – work on spectrum efficiency metrics is in hand within Mobile VCE
- p9 – I did not understand the meaning of the recommendation on this page
- p10 – the recommendation here relates to political, competitive, economic and environmental *policy*, rather than technical research, and thus falls outside of the RRAC’s remit (although we might have such a view !)

- p11 – forward-looking research – such PhD studentship studies could be commissioned through the Mobile VCE elective research mechanism, since the RA is a member. This approach could thereby draw in industrial expertise and involvement, and provide opportunities for increased industry collaboration, an earlier recommendation of the RRAC (3.2).
(I would be happy to explore this possibility with the RA – which could be particularly effective given the current downturn).
- p12 – please see my comments above re: the RRAC view of RAL. I believe the RRAC is concerned that the diverging steers given to Ken Craig in recent years have made his job very difficult and that he needs support – and a clear steer. But we should not presume to attempt to provide that without taking the necessary factors into account – including the recent difficulties he has faced in staff retention. Does section 3.8 deal with propagation or with RAL ? Section 3 sets out to address issues to be studied, not organisational issues ? (By mixing the two we may confuse the reader).
- Section 4 – the report must *justify* how *these 4 priorities* were derived if we are to make the recommendation made here.
- Section 5 – an ideal candidate for a diagram, showing circles whose size corresponds to the proportion of spend.
- Section 6 – we should come clean and say that we recognise these issues, but that further work remains to be done by the RRAC, with input from other parts of the RA in these economic aspects
- Section 7 – again, we should clearly state we’ve made a start but further work remains to be done.
- Section 8 – this section should be strengthened, and the statements in section 3.2 should perhaps be moved here, rather than reside there ?
- p15 – should the RRAC perhaps offer its views on the work of the three TGs ? The Chief Executive might expect us to provide him with our view – if I were him I would appreciate it ?
- p16 – what is this ‘review and evaluation process’ or ‘mechanism of assessment’ ? (Was this developed at the last meeting which I missed ?)

Walter Tuttlebee, 12th September