



Assessing Impact : The Experience of a REF2014 Sub-Panel Chairman

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Impact criteria and definitions

- Case studies : Reach and Significance, taken as a whole
- Template : The extent to which the submitting unit's approach described in the template is conducive to achieving impacts of 'reach and significance'
- Star ratings
 - 4* : Outstanding
 - 3* : Very considerable
 - 2* : Considerable
 - 1* : Recognised but modest
 - U : Little or no reach and significance; or not eligible; or not underpinned by excellent research produced by the submitting unit



Main Panel B

UOA 7: Earth Systems and Environmental Sciences

UOA 8: Chemistry

UOA 9: Physics

UOA 10: Mathematical Sciences

UOA 11: Computer Science and Informatics

UOA 12: Aeronautical, Mechanical, Chemical and Manufacturing Engineering

UOA 13: Electrical and Electronic Engineering, Metallurgy and Materials

UOA 14: Civil and Construction Engineering

UOA 15: General Engineering



Main Panel B

- *In developing the impact sub-profiles, all Panel B sub-panels used the same method of assigning star levels to case studies and impact templates.*
- *Each case study and each impact template was graded on a **nine** point scale consisting of integer and half-integer scores from 0-4, with the integer scores corresponding to the starred level descriptors for the impact sub-profile.*
- *Half-integer scores of 0.5, 1.5, 2.5 or 3.5 were assigned to case studies and impact templates that were judged to be on the borderline between two of the starred levels.*
- *A case study/template with a half-integer score contributed to the impact sub-profile by assigning half of its grade to each of the two starred levels that the borderline grade fell between.*
- *For example, if there were four case studies in the submission, each case study contributed 20 per cent to the impact sub-profile (the impact template contributed the remaining 20 per cent). If one of the case studies was graded as 3.5, it contributed 10 per cent at 4* and 10 per cent at 3* to the impact sub-profile.*



Sub-Panel 13

- 37 Submissions
 - 37 Templates
 - 141 Case studies
- 19 Panel members plus one appointed assessor.
 - Four panel members had current or recent industrial experience and were regarded as ‘users’.
 - 15 ‘academic’ assessors plus 5 ‘user’ assessors.
- Each case study was scored by one user and two academics
 - 18/19 case studies per academic
 - 28/29 case studies per user
- Each template was scored by one user and three academics
 - 7/8 templates per assessor



Sub-Panel 13

- The view was taken (by the chair) that all assessors were capable of assessing impact submitted within the scope of the sub-panel.
 - This differs from the assessment of research outputs
- Assessors did not confer prior to the panel meeting
- If all three (or four) scores for a case study or template differed by one star rating or less, the average score was used.
- If the three (or four) scores for a case study or template differed by more than one star rating, the scores were discussed at a sub-panel meeting, and a panel score agreed.
- There was a high degree of agreement prior to the meeting. Relatively few case studies or templates required discussion.



Sub-Panel 13 Feedback on Impact in general

The sub-panel received many examples of outstanding impact and noted many impacts which would continue to develop in the future. The sub-panel was impressed by the wide range of types of impact which were received and the scope and significance of the examples of impact submitted. The sub-panel saw impressive contributions made to the aerospace, rail, marine, energy, healthcare and manufacturing industries, as well as in many other areas, in addition to excellent contributions to policy and to environmental protection and sustainability. It was notable that the companies and organisations involved included major nationally and internationally known, well-established brands employing many thousands of people, as well as less well known organisations, throughout complex supply chains. There were also a significant number of small start-up companies, formed as a direct consequence of the academic research, some of which had been nurtured and grown through investment by regional and national bodies, as well as by other sources of funding.



Sub-Panel 13 Feedback on Impact Case Studies

- *Case studies that were set in a historical context enabled progression to be readily understood, and the real contribution of the submitting unit to be recognised.*
- *The sub-panel was keen to see traceable and realistic claims.*
- *In many case studies more quantitative evidence of the impact in the assessment period would have been helpful, and in some cases the extent of the institution's contribution to the impact claimed was exaggerated.*
- *On the whole the sub-panel found case studies which focussed on one or two key impacts rather than diffuse, multiple small impacts, more convincing.*
- *Corroborative evidence needs to be specific and informative.*



Sub-Panel 13 Feedback on Impact Templates

- *The sub-panel was impressed by impact templates that provided evidence of systems and processes underpinned by exemplars.*
- *The best of these concentrated on the mechanisms for achieving impact and also gave consideration to the role of staff development and support.*
- *Templates that developed an effective strategy and plans in addition to describing the approach to impact were welcomed, although the sub-panel would also have welcomed more emphasis on metrics for measuring and quantifying impact.*
- *The emphasis in some institutions on the assistance provided to academic researchers to enable the exploitation of their research was notable.*
- *More information about unit-specific activities would have been appreciated, with less reliance on information about generic institutional structures.*



Volume Weighted Impact Sub-Profiles Main Panel B and its Sub-Panels

		4*	3*	2*	1*	U
	Main Panel B	37.8	45.7	13.3	2.3	0.9
7	Earth Systems and Environmental Science	36.2	53.8	9.1	0.4	0.5
8	Chemistry	39.6	52.6	7.5	0.3	0.0
9	Physics	37.0	46.5	15.2	1.1	0.2
10	Mathematical Sciences	35.9	46.6	14.1	2.3	1.1
11	Computer Science and Informatics	36.9	38.0	15.0	7.8	2.3
12	Aeronautical, Mechanical, Chemical and Manufacturing Engineering	38.4	47.0	13.9	0.7	0.0
13	Electrical and Electronic Engineering, Metallurgy and Materials	36.5	49.0	12.1	1.6	0.8
14	Civil and Construction Engineering	33.9	52.5	11.4	0.0	2.2
15	General Engineering	41.6	39.8	15.5	2.3	0.8



Volume Weighted Impact Sub-Profiles for all Main Panels

	4*	3*	2*	1*	U
All submissions	44	40	13	2	1
Main Panel A	60.9	30.2	7.4	0.8	0.7
Main Panel B	37.8	45.7	13.3	2.3	0.9
Main Panel C	39.1	40.3	16.4	3.6	0.6
Main Panel D	36.7	44.4	15.1	3.1	0.7



And finally . .

- HEFCE REFLECTIONS meeting, March 25th 2015
- Included
 - ‘Analysis of REF impact case studies’, by Jonathan Adams, Digital Science, and Jonathan Grant, Policy Institute, King’s College London
 - ‘Evaluation of impact in the Research Excellence Framework’, by Professor Tom Ling and Catriona Manville, RAND
- I commend both reports to you. They are available on line at <https://www.hefce.ac.uk/news/Events/2015/Name,101448,en.html>
- The first includes a text mining exercise on all case studies as a preliminary exploration of the areas in which impact had occurred.
 - Lots of caveats and reservations (see report)
 - Identified key phrases as domain indicators – such as ‘mental health’, ‘mobile technologies’, ‘community and local government’
- The following slide (my last!) shows how the case studies from the sub-panels were clustered, but also shows a spread of impact into a wide range of domains.

