

Essays on the Adjudication of Quality in the Global Academic Literature

Policy Development and the SCOPUS Citation System

Part 2: The Work of the Content Selection Advisory Board 2012 - 2016:

David Rew, MA MB MChir (Cambridge) FRCS (London)

Honorary Consultant Surgeon to the Faculty of Medicine, University of Southampton, UK
And to the Clinical Informatics Research Unit.

Former Editor in Chief of the EJSO, The European Journal of Surgical Oncology, 2003-2009

Subject Chair for Medicine to the SCOPUS Content Selection Advisory Board, Elsevier BV,
The Netherlands, 2009 to the Present

A Working Paper for publication on the ePrint Server of the University of Southampton
Re-use is subject to a CC/BY Creative Commons Licence for Attribution to the Author 2025

10th February 2026

Correspondence to dr1@soton.ac.uk

Key Words: SCOPUS; Content Selection Advisory Board, Bibliometrics: Publishing Ethics,
Publication Malpractice; Policy Development; SCOPUS Title Evaluation Platform

Contents

Abstract

Introduction

Policy Development and the SCOPUS CSAB in 2012

The Subject Chair meeting of 24th - 25th May 2012 in Barcelona, Spain

The Policy on the Management of Conference Proceedings in Scopus

The Policy on the Management of Academic Books in Scopus

The Policy on the Development of Local SCOPUS Content Advisory Boards

Policies on Public and Professional Engagement

The Fundación Española para la Ciencia y la Tecnología (FECYT)

Policy on the Evaluation of Hosted Journals

The Subject Chair Meeting in Penang, Malaysia, 31st October - 3rd November 2012

Public Engagement and The Elsevier Ethics Programme in 2012

The Policy Work of the SCOPUS CSAB in 2013

The CSAB Meeting at the Elysee Palace Hotel in Nice, France, 22nd-24th May 2013

Policy and the “Internationality” of Journals

Strategy and Policy for Journal Re-Evaluation

Public Engagement Policy and the Scopus Local Advisory Board projects

The Research Assessment and Evaluation Process in Italy

“The SCOPUS Effect” and Publication Malpractice

The CSAB meeting in Rio de Janeiro, Brazil, 30th Oct – 1st Nov 2013

Continued Evolution of the Scopus Title Evaluation Platform in 2013

The Conference Papers expansion project in 2013

The Academic Book expansion project in 2013

Policies on Predatory Publishers and Publication Ethics

Publication Fraud and Open Access Journals

Public Engagement Policy, Research Assessment and Journal Evaluation in Brazil

Journal Performance and Re-Evaluation

The policy work of the SCOPUS CSAB in 2014

The SCOPUS CSAB Meeting in Amsterdam 4th - 6th of June 2014

Policy Development in Journal Re-Evaluation in 2014

The Hijacking of SCOPUS-Listed Journals for Profit

The Exemplar of Experimental and Clinical Cardiology:

The CSAB meeting in Singapore 29th - 31st of October 2014

The policy work of the SCOPUS CSAB in 2015

The Subject Chairs meeting, St Petersburg, Russia 27th – 29th May 2015

Journal Metrics and the introduction of the Citescore Metric

The Subject Chair meeting in Washington DC, 4th - 6th November 2015.

Malpractice Detection and the New SCOPUS RADAR system

Policy Development on Scientific Integrity and Article Retraction

The policy work of the SCOPUS CSAB in 2016

The Subject Chairs meeting in Warsaw, Poland, 25th-27th May 2016

The Subject Chairs meeting on 2nd -4th November 2016 in Toronto, Canada

Essay Summary

Acknowledgements

References

Abstract

The information which is generated by the principal global bibliometric and citation systems, Web of Science and SCOPUS, plays a major role in shaping academic behaviours and institutional strategies. The selection of academic source material, primarily journals, for bibliometric analysis is a key element in the quality assurance to which each system aspires.

As the Subject Chair for Medicine for the SCOPUS Content Selection and Advisory Board (CSAB) since 2009, I have been deeply invested professionally in the generation and implementation of the policies which underwrite these quality assurance processes.

I have also become very interested in the technologies and conceptual frameworks which have developed the SCOPUS digital information system through a period of dramatic change in academic publishing. I have witnessed the move from paper to digital systems; the collapse in costs of digital publishing; the global surge in publishers and journals; the shift from subscription-based to “Article Processing Charge” based funding; and the explosion in the scale and complexity of publication fraud.

In the previous essays in this series on the Adjudication of Quality in the Global Academic Literature, I described the early development of the policies which govern the design and operation of the SCOPUS Title Evaluation Platform (STEP) through 2010-2011, with particular reference to the academic journal evaluation process.

In this essay, I describe the further work of the CSAB from 2012 to 2016, with a particular emphasis on policy development for SCOPUS and in respect of Title Selection in the dynamic environment of change across the academic publishing ecosystem.

This period saw the rise to prominence of the work of Jeffrey Beall in highlighting the prevalence and complexity of predatory publishing; the introduction of the Elsevier Citescore metric and the diversification of bibliometric measures; rapid growth of journal applications for a SCOPUS listing; and the early development of the SCOPUS re-evaluation programme.

Introduction

SCOPUS occupies a central role in the global ecosystem of academic publication. It is a key component of a proprietary information system which has been developed by Elsevier BV for the provision of bibliometric information on the performance of authors, journals, books, publishers, faculties and institutions to Universities, Corporations and Governments worldwide. It functions in respectful competition with the Web of Science, which subsumes a similar global role and which is owned by Clarivate Analytics.

SCOPUS aggregates and processes data on academic journals, books, conference proceedings, grant awards and patents in partnership with several thousand academic publishers and other information provider organisations in a huge and AI-augmented relational database.

The ownership of the original content in full remains with the publishers. They benefit commercially from access to information on their publications within SCOPUS (and similarly through the Web of Science (WoS) from Clarivate Analytics) and from the reputational gain that a listing in these systems provides. This listing is underwritten by the quality assurance (QA) process which is overseen by the SCOPUS Content Selection Advisory Board (CSAB), and by a separate process within WoS.

SCOPUS provides a range of outputs from which valuable knowledge can be derived and a range of author-, article-, journal- and publisher- based metrics can be calculated and related to performance indices such as grant awards. Purchasers of the system can make decisions around the academic inputs outputs of individuals, teams and units; can assess the “Gross Academic Product” of institutions and countries; and can make informed decisions on fraudulent practices and aberrant publishing outputs.

In this series of essays on the Art and Science of Academic Journal Editing and Publishing, I am seeking to create a durable record of the events and discussions of the SCOPUS CSAB from my own records, research, and perspectives for future reference.

I have described the creation of the SCOPUS Board in 2009 (eprints.soton.ac.uk/507668/); the technical development of the SCOPUS Title Evaluation Platform (STEP) from 2010 onwards (eprints.soton.ac.uk/507702/); and the initial phase of policy development through 2010-2011 (eprints.soton.ac.uk/508986/), in earlier papers in this series. In this essay, I describe policy development SCOPUS and STEP from 2012 to 2016.

Policy Development and the SCOPUS Content Selection Advisory Board in 2012

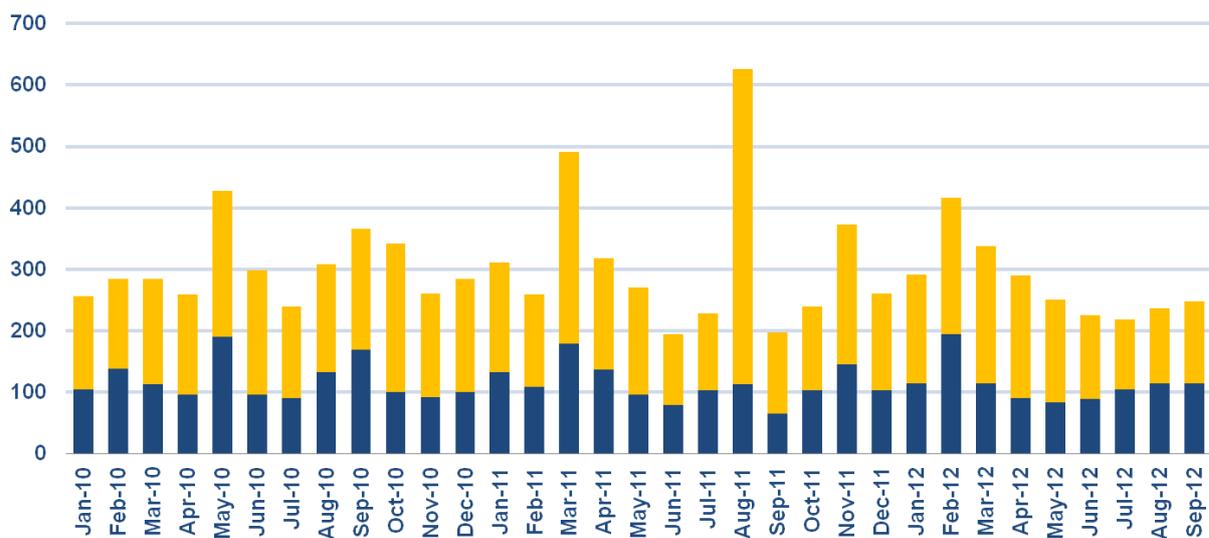


Figure 1: The volume of new titles suggested by month from January 2010 to September 2012. Blue Bar = titles suitable for review ; Orange bar = titles not suitable for review (with acknowledgement to Shareef Bhailal of Elsevier)

By 2012, STEP was established as a live digital system, and journal throughput was well established (Figure 1) , in that:

- In 2011, 3,884 titles had been submitted for evaluation in all subjects, of which 1,394 were deemed suitable for review, or on average 116 of 324 titles per month.
- In the first nine months of 2012: 2,515 titles were suggested, of which 1,023 were deemed suitable for review, or on average 113 of 279 titles per month.

There was growing global awareness of the commercial and reputational value of a SCOPUS listing for publishers and of SCOPUS data for institutions, companies and Governments.

There was a corporate ambition within Elsevier to further expand the subject and content

coverage in SCOPUS, including the “non- traditional” Science, Technology, Engineering, Electronics, Medicine and Mathematics in the “STEM” subject areas, and in the Arts and Humanities, Social Sciences and Law.

Board meetings were held twice yearly over 2-3 days each, in the Spring and Autumn. They were also regularly attended by senior Elsevier managers and subject specialists to introduce and explore technical developments and strategies for SCOPUS system, and to discuss changes in the academic publishing landscape.

The Subject Chair meeting of 24th - 25th May 2012 in Barcelona, Spain

This meeting was held at the Hotel Arts Barcelona. Key policy topics to discuss included:

- A Policy on the De-selection of failing journals from Scopus;
- The processes by which a “failing” journal would be assessed;
- Remediation periods and/or permanent exclusion following evaluation.

The Policy on the Management of Conference Proceedings in Scopus

We discussed Policy on the selection and evaluation of Conference Proceedings in Scopus. Conference proceedings are published compilations of the presentations at a conference. Most conferences are themed, and organisations such as the IEEE (The Institute for Electrical and Electronics Engineers) and the ACM (Association for Computing Machinery) have long histories and strong reputations for organising reputable conferences and conference series in their fields.

We noted the transient nature of many conferences, the wide range in quality, the variations in peer review and the infiltration of the sector by opportunist businesses. Unlike the situation with formal peer reviewed journals, articles for conference proceedings are linked directly to the conference speakers tend to be accepted in finished format in advance of the conference without the same preparatory rigour.

We agreed that the evaluation of conference proceedings should continue to be managed on a case by case and in a separate workstream basis from the Elsevier New York office under Judy Salk, given their specialist knowledge of the conference sector.

The Policy on the Management of Academic Books in Scopus

We also discussed a policy the expansion of research orientated Academic Book content in Scopus. We distinguished such books from standard undergraduate and postgraduate textbooks, which would not be considered. We also distinguished such books from Book Series, which are a series of generally a series of “pocket books” on a common theme, each edition of which comprises a collection of chapters with references which could be processed for bibliometric data like a journal.

The commercial case for substantial investment by Elsevier in this project was that academic books are a significant element of professional outputs in the Social Sciences, Arts and Humanities in particular. They are therefore a significant element in institutional and national performance evaluation programmes such as the UK Universities Research Excellence Framework programme which some countries run periodically.

Academic books and Book Series were both distinguished from academic journals in that they were generally sold on a case by case basis rather than by serial subscription. Academic books are very different from serial and peer reviewed periodicals, in that they are usually individual rather than serial, and their evaluation did not fit the STEP template.

No such project had ever previously been undertaken, and the plan was to start cautiously with a small number of such books to develop the system and data capture processes. We agreed that academic books could be suggested individually or collectively in cohort submissions from trusted publishers.

However, it would not be easy to apply our recently established technical assessment process to academic books through the STEP system, although references would be captured and processed for bibliometric analysis by the established Elsevier corporate contracting systems. We therefore decided that book evaluation would proceed outside STEP and to the trusted judgement of the relevant individual subject Chairs.

A number of eligibility criteria were established for academic books, in that:

- Books must be available in a digital format (e.g., PDF or XML).
- Metadata must be in ONIX (Online Information Exchange) or MARC (MAchine-Readable Cataloging) formats and include BIC (Book Industry Communication) or BISAC (Book Industry Standards And Communication) subject codes.
- The book metadata (title, abstract, keywords) must be accurate and in English.
- All books must possess a valid International Standard Book Number (ISBN).
- The content must be high-quality original research and be peer reviewed.
- Dissertations, biographies, and popular science books are not in scope.

The academic book programme started modestly with a plan to capture the metadata on a few thousand books, but demand for inclusion has been so large that the portfolio has now expanded to almost 250,000 titles in mid 2025.

Given the increase in volume of submissions, we later moved to the selection of books on a Trusted Publisher strategy, whereby publishers of trustworthy content who were accepted into the programme would be permitted to propose titles from their own collections in SCOPUS. Such publishers can now submit book collections rather than individual titles, according to the following conditions:

- Accepted collections are submitted automatically to Scopus for review;
- Submitted books are reviewed for scope;
- The book (or monograph), the chapters and references are indexed in Scopus

This policy had relatively little impact on my own field of Medicine, where original academic research texts are much less common than academic journals in the delivery of contemporary content.

The Policy on the Development of Local SCOPUS Content Advisory Boards

Derrick Duncombe of the Singapore based Elsevier Marketing Team had taken an enthusiastic lead in developing the Local Advisory Boards. He reported that “Following the successful pilot of the local board or Expert Content Selection & Advisory Committee (ECSAC) in Thailand, Elsevier had signed a Memorandum of Understanding (MoU) with the National Research Foundation of Korea (NRFK). A Chairman had been selected for ECSAC-Korea and a delegation was to visit Elsevier Headquarters in Amsterdam. They were represented at meetings of the CSAB main board by Professor Kim Hyungsun.

Policies on Public and Professional Engagement

The Fundación Española para la Ciencia y la Tecnología (FECYT)

In Barcelona, we were introduced by Cristina González Copeiro and Izaskun Lacunza to the work of FECYT, the Spanish Foundation for Science and Technology, which runs a national evaluation programme to assess the scientific and editorial quality of Spanish titles. The principles of FECYT were well aligned with the work of the SCOPUS CSAB. National level organisations of this quality and vision are important to the health of the global academic publishing ecosystem, and the “pre-processing” of regional journals is of great help to us in identifying higher quality journals for accession to SCOPUS .

Since 2007, FECYT had aimed to set best practices and quality standards in academic edition, for evaluating National academic journals and for providing a national open access platform, the Open Journal System (OJS). FECYT maintains the open software OJS based platform RECYT (Spanish Repository for Science and Technology).

Since 2009, FECYT has also managed [RECOLECTA](#), the National Harvester for Open Access Repositories, in collaboration with the National Network of University Libraries (REBIUN). FECYT encourages every Spanish University and R&D centre to maintain an institutional repository of which there are 74 in Spain in 2025.

Policy on the Evaluation of Hosted Journals

We became aware in 2012 from newly submitted journals of the new commercial phenomenon of Journal Hosting, which is often referred to as a "Production & Hosting" (P&H) model. In this system, established and trusted publishers provide the infrastructure, workflow systems and marketing to support small regional or institutional journals on a commercial basis.

The managing editors of such journals were of course keen to secure the earliest possible listing for these journals, which are often weak by international standards, to justify the investment by their publishers. From time to time they sought preferential acceleration of acceptance of hosted journals into SCOPUS. This appeared to be an inappropriate use of the privileged status of these publishers, and it was informally but firmly addressed, such that P&H journals could not expect to receive preferential treatment in the STEP system.

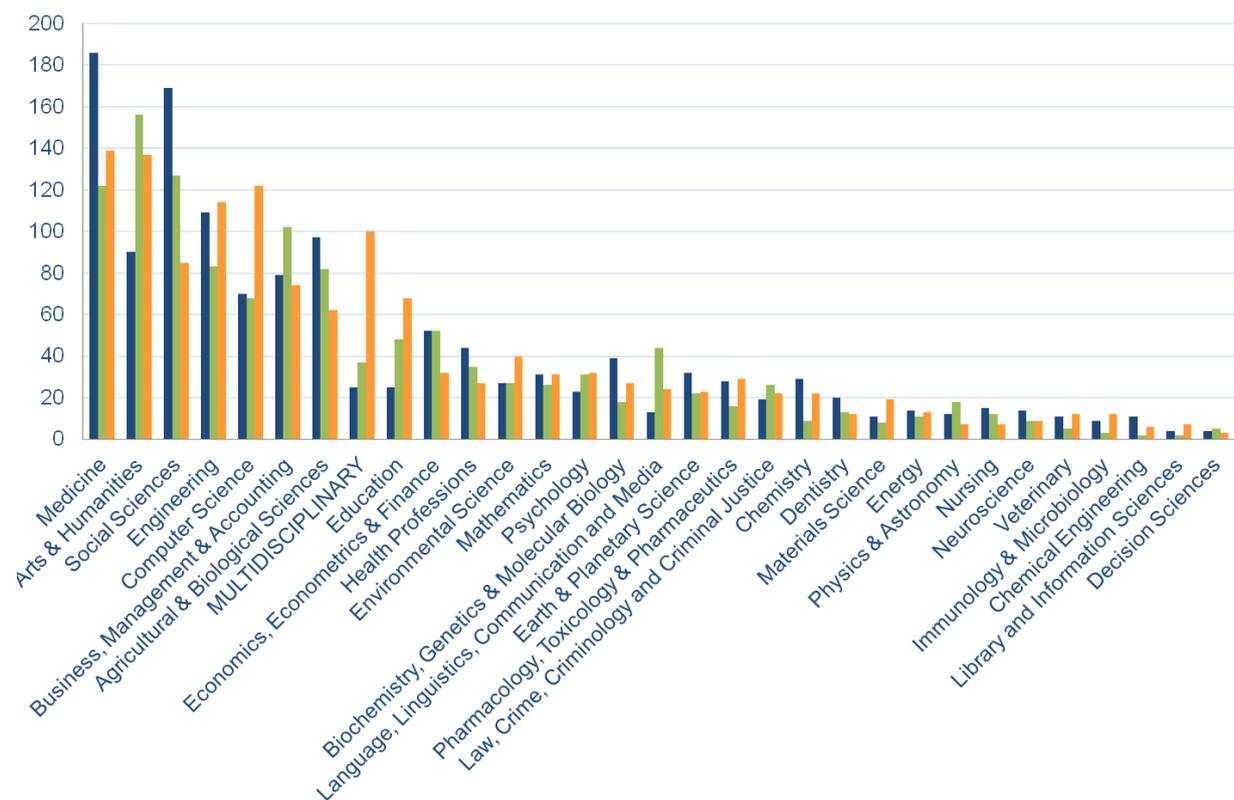


Figure 2: Titles for review through STEP per subject area from January 2010 to September 2012. Key: Blue bar = 2010; Green bar = 2011; Orange Bar = 2012 (with acknowledgement to Shareef Bhailal of Elsevier).

The Subject Chair Meeting in Penang, Malaysia, 31st October - 3rd November 2012

At this three day meeting, the Board considered the future of scientific publishing, the SCOPUS content road map, SCOPUS operational efficiencies, re-evaluation metrics, updates to the STEP system, and the permanence of board decisions. Regional presentations were received on the academic journal landscapes in Thailand, South Korea and Malaysia.



Figure 3: Screenshot from Ole Evensen’s educational video “A Plagiarism Carol (2012)

<http://www.youtube.com/watch?v=Mwbw9KF-ACY>

Public Engagement and The Elsevier Ethics Programme in 2012

We continued with the policy of public engagement during 2012. Catriona Fennell, who was Director of Publishing Services at Elsevier for STM Journals at the time, led a programme of education on Ethics matters which was targeted at young publishing professionals.

At that time, Catriona was responsible for the implementation of CrossCheck, for liaison with COPE, and for content creation for Elsevier’s Publishing Ethics Resource Kit. She set up an advisory panel for the Ethics Education Program, comprising:

Ole G. Evensen, Assisting Library Director, University of Bergen, and creator of educational content. Ole’s Plagiarism Carol video is still live on YouTube in 2025 (Figure 3).

John Dahlberg, Director, Division of Investigative Oversight, Office of Research Integrity,

Alexander (Sandy) T Florence, then Editor in Chief of the *Int. Journal of Pharmaceutics*.

Margaret Rees was Secretary of the Committee on Publication Ethics (COPE), Editor in Chief of *Maturitas* and the Chair of Oxford Research Ethics Committee B in Oxford.

David Rew, as the SCOPUS CSAB Chair for Medicine

The program was launched at the EuroScience Open Forum (ESOF) conference in Dublin in July 2012. Based on the success of the Dublin meeting, from where Ole's video (Figure 3) was believed to have reached some 5000 early career researchers, Catriona proposed a live webinar on publishing & research ethics. This was the era before TEAMS and Zoom

The webinar was arranged for 28th September 2012, at which Sandy, Margaret and I spoke on issues of Ethics, Plagiarism and Malpractice. ~1000 registrants signed up for the webinar. The feedback was very positive, and demand from the US led us to run a repeat session in late January 2013, from the Elsevier Amsterdam office. There were 508 "live" attendees.

I was subsequently invited by Noelle Gracy of Elsevier to speak at a webinar on the topic of "How Libraries are Helping Researchers to Navigate Open Access (OA) Publishing Choices" **on October 17th 2013**, along with Robin Champieux, Scholarly Communications Librarian at Oregon Health & Science University. This talk attracted 927 views online and scored 4.3 out of 5 for attendee satisfaction.

At that time, Open Access publishing was not yet commonplace. SCOPUS recorded which fully OA journals were registered with the Directory of Open Access Journals (DOAJ [doaj.org]), but the OA status of individual articles was not recorded. There were 2,629 OA titles in Scopus in October 2013. We recognised that the reporting of OA information at the article level should be further developed in SCOPUS.

Wouter Gerritsma reported on a further Library Connect Webinar in 2013, and on a symposium on publication at Wageningen University which was attended by over 500 people. He observed that workshops are very valuable in securing unique feedback from attendees, including journal editors.

These presentations were not regularised, but they demonstrated the power (and technical limitations) of the Webinar model with the then prevailing technology. They nevertheless anticipated the modern functionality of Zoom, TEAMS and other webcasting tools, and they surge in popularity of the YouTube and social media platforms, highlighted the potential of more efficient ways of delivering high quality content to large audiences than were possible a decade ago.

The Policy Work of the SCOPUS CSAB in 2013

The CSAB Meeting at the Elysee Palace Hotel in Nice, France, 22nd-24th May 2013

In Nice, we addressed policy in respect of “Internationality”, Journal Re-evaluation, and the progression of Local Scopus Advisory Board projects. We discussed the lessons of SCOPUS support for the Italian Research Assessment and Research Evaluation exercise, and “The SCOPUS Effect”, but which some journals underwent rapid growth and diversification following the award of a SCOPUS listing.

Policy and the “Internationality” of Journals

Our selection policy included the requirement for evidence of “Internationality” as a hallmark of quality for a journal. We have since questioned this assumption.

“Internationality” is a broad concept, and evidence may take many forms. These include the internationalisation of authorship; of sources of content; in the aims and scope of the journal; and of the editors and reviewers.

Internationality as a concept is open to inappropriate use and to fraudulent abuse. It drives unrealistic ambitions for institutional and locoregional journals which lack the resources to validate authors, editorial board members and reviewers beyond its familiar environment.

David Nelken (Law and Criminology) highlighted the problem specifically in the field of law journals. He pointed out that the local language and culture is fundamental to local Law, and a high quality law journal may see no reason to “internationalise” its processes, and it should not be penalised for failure to do so, or to revert to English language abstracts.

Strategy and Policy for Journal Re-Evaluation

In Nice in 2013, Wim Meester introduced the topic of journal re-evaluation. SCOPUS had now been functioning for eight years, and the behaviour and performance of a proportion of the listed journals might have changed significantly for better or for worse since acceptance. The Elsevier technology team was developing a journal re-evaluation tool, and we needed to decide what criteria would decide the need for de-selection of a title.

We needed to understand how re-evaluation and de-selection of poorly performing journals would affect the continuity and integrity of the SCOPUS.com database. We considered indices of poor performance, which might include changes in Citation Activity, a decline in the number of articles per year, and evidence of misbehaviour and untrustworthiness on the journal editorial board.

Public Engagement Policy and the Scopus Local Advisory Board projects

Wim updated us on the progress by Elsevier in setting up a local board in China, in partnership with the Institute of Scientific and Technical Information of China (ISTIC); and on a series of recent Scopus conferences for editors in Asia-Pacific countries.

We learned about **the Korean Citation Index (KCI)**, and that the Korean Advisory Board had organized its fourth teaching workshop in March 2013. In 2012, 24 titles had been pre-selected for submission to SCOPUS by the Korean advisory board, and one Korea based publisher of conference proceedings had been identified as a predatory publisher after investigation by the Korean Board. Its titles were to be discontinued in Scopus.

The Research Assessment and Evaluation Process in Italy

Dr Marco Malgarini gave a presentation in Nice on behalf of ANVUR, the Italian national agency for the evaluation of universities and research institutes. Elsevier was keen to assist such programmes with the SCOPUS data sets. There were many complexities in such projects, particularly in the evaluation of Arts and Humanities (A&H) research.

The evaluation of academic performance in Italy included measures of research, teaching and other activities. ANVUR used bibliometric data from the three best research “outputs”

from 2004 – 2010 from each researcher. In STM subject fields, 50% of the evaluation comprised bibliometric data and 50% was through peer-review. Social science and A&H research assessments were based on peer-review only.

450 scientific experts in 14 subject areas and 17,000 national and international reviewers had been involved. 180,000 articles had been submitted, of which 74% were journal articles. 20% were books and 6% were conference proceedings and other sources. Both WoS and Scopus citation data were used, and there was no formal appeal process. Much administrative effort was reportedly needed to ensure the fairest achievable outcomes.

“The SCOPUS Effect” and Publication Malpractice

In Nice in 2013, we first discussed the adverse effects that acceptance by Scopus might have, including explosive growth in the number of articles after acceptance. We recognised that we needed to link a journal analysis tool in the re-evaluation of accepted titles. This included the large numbers of journals which were accepted between 2004 and 2008, before our more rigorous evaluation system was introduced.

We have long considered and expected that journals would improve through competition and openness of their performance metrics following accession to SCOPUS, but we have not to date (end of 2025) tested this assumption in a systematic way.

We have also long known that SCOPUS listed journals are a target for publication malpractice, and that the most egregiously "gone bad" journals can be identified through our increasingly sophisticated SCOPUS Radar tools, about which I have written elsewhere (see <https://eprints.soton.ac.uk/507702/>).

However, as of late 2025, we did not yet have any systematic statistics on the dynamic subject-normalised performance of all journals, which may be better, the same or worse over time, and against which we can fully understand and easily detect the characteristics of "going- or gone-bad" journals in the large grey zone where predatory behaviours may well be more subtle and lurk unsuspected.

The CSAB meeting in Rio de Janeiro, Brazil, 30th Oct – 1st Nov 2013



Figure 4. The Elsevier Team and Content Selection Advisory Board members in Rio de Janeiro, October 2014

Our next Board Meeting in Rio was preceded by an Editor workshop on Tuesday 29th October 2013 at Unicamp, the State University of Campinas in the Sao Paulo region, about an hour flight from Rio.

Olivier Dumon of Elsevier discussed strategy in respect of the challenges of integrating the many different legacy Elsevier data systems into a unitary whole, and strategies to optimise the researcher and the author experiences of using the system.

Liz Dyas of Elsevier and Wouter Gerritsma for the Board led a discussion on future Scopus & SciVal interfaces, and the advantages of SCOPUS over Google in the Social Science subjects in selectively accessing quality assured content in SCOPUS.

Continued Evolution of the Scopus Title Evaluation Platform in 2013

Gillian Griffiths of Elsevier explained the planned upgrades in the next iteration of STEP for early 2014, including Local board work-flows, an improved Submission Form and the introduction of requests for revisions in weak applicant journals. We discussed:

- The requirements for evidence of Editorial board diversity as a mechanism for maintaining editorial oversight and quality;
- Means of assessing the Peer Review process for every journal.
- Individual email access for the validation of Editors and Editorial Board members of applicant journals.
- The development of graphical interfaces within STEP to visualise journal performance.
- The use of the words “Defer” and “Reject” for titles which were turned down for immediate listing and given “embargo periods”.

The Conference Papers expansion project in 2013

Judy Salk from the Elsevier New York office reported that 704 titles, 3,700 conference events, 81 countries (publisher of the conference), 250,000 conference papers and 3.3 million references had been added to SCOPUS. Recruits to Scopus to the SCOPUS Conference portfolio included the Canadian Computer Science community. No policy changes were needed.

The Academic Book expansion project in 2013

Wim Meester reported that there were currently 7,500 book titles indexed in Scopus. 75,000 more were to be added over the next three years, with 10,000 new books per annum thereafter. Selection was now to be based on publishers rather than individual titles.

Policies on Predatory Publishers and Publication Ethics

Predatory publishers & Publication Ethics were on our professional radar by mid 2014. We discussed the use of Beall’s List to identify high risk journals, but the limitations and uncertainties of this approach were fully recognised. For example, we noted that publishers who were banned from SCOPUS might well disappear from view and re-emerge using other branding.

.

Publication Fraud and Open Access Journals

The new wave of Open Access Journals was giving rise to concerns on early evidence of publication fraud. Manolis Papadrakakis, our Subject Chair for Engineering, and Peter Brimblecombe, and Subject Chair for the Environment, highlighted a paper in Science by John Bohannon wrote under the title of “Who’s Afraid of Peer Review?” with the subtitle

“ A spoof paper concocted by *Science* reveals little or no scrutiny at many open-access journals” .

Bohannon demonstrated the absence of peer review and the ease of publishing fantastical content in a series of “predatory” journals (Science 4 Oct 2013 Vol 342, Issue 6154 pp. 60-65 [DOI: 10.1126/science.342.6154.60](https://doi.org/10.1126/science.342.6154.60))

Public Engagement Policy, Research Assessment and Journal Evaluation in Brazil

We learned from Dr Paula Melo of the Brazilian triennial journal evaluation programme QUALIS, under the direction of the Brazilian Federal Agency for Support and Evaluation of Graduate Education, CAPES.

We also learned about **the Scientific Electronic Library Online – SciELO**, which covers a selection of Brazilian scientific journals, ~75% of which were also covered by Scopus. SciELO has since evolved as a major repository for content from Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, Spain, West Indies, Mexico, Paraguay, Peru, Portugal, South Africa and Uruguay (see <https://www.scielo.org/en/>) .

Journal Performance and Re-Evaluation

Metric	Benchmark	Explanation
Self-citation rate	$\geq 200\%$	The journal has a self-citation rate two times higher, or more, when compared to peer journals in its subject field.
Total citation rate	$\leq 50\%$	The journal received half the number of citations, when compared to peer journals in its subject field.
CiteScore	$\leq 50\%$	The journal has a CiteScore value that is half or less than the average CiteScore value, when compared to peer journals in its subject field.
Number of articles	$\leq 50\%$	The journal produced half, or less, the number of articles, when compared to peer journals in its subject field.
Number of full-text clicks on Scopus.com	$\leq 50\%$	The journal's abstract are used half as much, or less, when compared to peer journals in its subject field.
Abstract usage on Scopus.com	$\leq 50\%$	The journal's full text are used half as much, or less, when compared to peer journals in its subject field.

Figure 5: the six re-evaluation metrics. I have addressed this project in much greater detail in my essay on the technical development of the STEP, see <https://eprints.soton.ac.uk/507702/>

Gillian Griffiths and Wim Meester led a detailed discussion on the measurement of Journal performance and of recognition of the quantitative and qualitative criteria to support targeted re-evaluation. We settled on the following six metrics, as identified in Figure 5, to identify the most egregious performance outliers in the SCOPUS portfolio by these criteria.

We considered the benchmarking of applicant journals against a cohort of established journals in the same field, and we noted that some countries were developing their own local evaluation metrics, as with **The Institute of Scientific and Technical Information of China**.

We explored the wider consequences of journal re-evaluation and ejection from SCOPUS, and the ways in which we could communicate and validate such decisions, while giving the affected publisher fair opportunity and the time to respond. We perceived the need to strengthen the advance warnings around the re-evaluation of a title, and to make the fact and workings of the re-evaluation process public.

Experience subsequently showed that while some publishers of weak and failing journals respond vigorously and constructively, others did not respond at all, or had not yet understood that a listing in SCOPUS could not be assumed as a “Life Membership” ticket, but as a dynamic process of assessment and of oversight of ongoing performance both by, SCOPUS and from the public commentariat, as evidenced in blogs and web publications.

The work of the SCOPUS CSAB in 2014

The SCOPUS CSAB Meeting in Amsterdam 4th – 6th of June 2014

The meeting in Amsterdam celebrated 10 years of Scopus. It included nine presentations by various Elsevier speakers on issues of corporate interest around the development of SCOPUS; Marketing; Custom analytics using Scopus data; Third party publisher relations; Scopus user interface and design; The Scopus platform; profiles and data quality; Journal Production & Hosting; and Custom analytics using Scopus data. The leads for the Thai, South Korean and new Russian Local Boards gave presentations on their work.

Titles reviewed per subject area

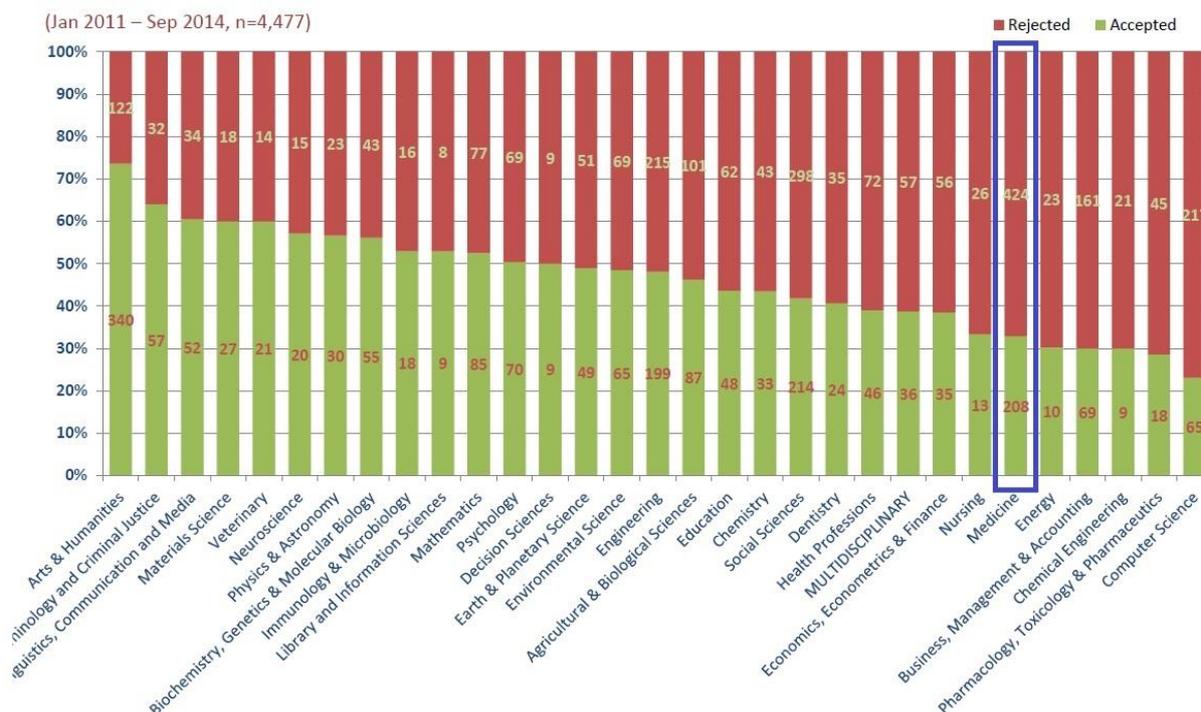


Figure 6: This shows the number of titles reviewed per subject area from January 2011 to September 2014. Green = accepted titles. Red shading = rejected titles. The Medicine workload is highlighted in the blue box. 208 medical titles were accepted and 424 were rejected or deferred. Other acceptance/rejection ratios varied by Subject and with time.

Policy Development in Journal Re-Evaluation in 2014

In early May 2014, I was invited by Wim Meester and Judy Salk to expand on my concerns about an OMICS journal which I had rejected, and which decision had been challenged by the publisher, OMICS. My concerns were somewhat prescient, in that OMICS were subsequently prosecuted in the US Courts and fined \$50M for publication malpractice.

I replied that:

“I think that in the past I had been a little naive and generous about OMICS. The presentation of their journals seemed to be highly professional. However, there was something about the most recent journal that I was asked to look at which really did not add up, so I did some research on the web.

Google Earth is a great tool for visiting a postal address, from which I learned that the given postal address is apparently that of a "front company" marketing organisation rather than a publisher. This had led to some web and blog comments from very disgruntled individuals highlighting this fact. The building certainly did not seem to be a place where some 600 employees could coordinate a major publishing house for some 350 journals. Furthermore, it appeared that OMICS was at heart an Indian and not a US company. I wondered why an honest publisher would go to such lengths to disguise its origins.

I was also concerned about the Conference organising wing of the company. This followed our previous Board discussions in Rio about companies that organise "sham" conferences for large fees, and then delegates turn up to discover a shambles. I looked at some photographs of their conferences which showed suspiciously few delegates.

I had also had concerns about the Editor and Editorial Board and that there was no obvious Editor in Chief, even though the journal was promising to turn papers around in 72 hours....

I suspected that many respectable individuals accept invitations to be listed on the editorial boards of such journals, with far less knowledge of the modern publishing industry than we have, without fully understanding "what lies beneath".

By the time I had finished looking over this journal the alarm bells were ringing loudly in my mind, hence my advice to recommend rejection of the journal.

This set me thinking much more deeply about the entire "pay to publish" industry, and the extent to which it may have been infiltrated by profit seeking businesses with little or no regard for the quality of the underlying product, which prey upon the critical need for individuals to publish to advance their careers.

It also set me thinking that we need much more detail in STEP about each publisher with each journal submission, as our Watch List is very vague on detail.

I suspect that this particular case illustrates the limits of our powers on the CSAB when we are up against organisations with clever people running what might well be seen as deliberately fraudulent and exploitative businesses on a global scale."

In policy terms, this case exemplified the limits of our depth of knowledge of publication malpractice at the time, and the need to fall back (unsatisfactorily) on "instinct" and qualitative experience. Such cases underwrote the drive for better technical solutions, and they informed the first iterations of the computerised re-evaluation strategy.

The Hijacking of SCOPUS-Listed Journals for Profit

We were also aware by 2013 of evidence of Journal Hijacking. This is the process by which a journal which has been accepted for SCOPUS is taken over by criminal elements and subverted to sell access to authors of any content who are seeking a "SCOPUS- validated" publication for career advancement. Such journals show a sudden and rapid growth in content of articles which have no relevance to the purpose of the original journal and which show no evidence of serious peer review or editorial input.

Once our eyes were opened to the scale of this malpractice, we all began to see suspicious behaviour in our various subject fields. By mid 2014 our early concerns were being supported by evidence in the public record (see later in this chapter)

The Exemplar of Experimental and Clinical Cardiology:

Policy was shaped by practical experience. A report in the Ottawa Citizen newspaper had recently reported that:

"A respected Canadian medical journal that was sold to offshore owners last year is now printing scientific junk for hire, but still trading on its original good name. Experimental & Clinical Cardiology was published in Oakville, Ont., for 17 years and had a solid reputation for printing original medical research. It was sold in 2013, and its new owners (Pulsus Group) say they are in Switzerland, but do their banking in Turks and Caicos. And for \$1,200 U.S. they'll print anything — even a garbled blend of fake cardiology, Latin grammar and missing graphs submitted by the Citizen. ..."

The journal was flagged last month by Jeffrey Beall, a university librarian in Colorado who compiles a widely-followed list of “predatory” publishers. These are in the business of printing research that isn’t good enough for real science journals. They make it look legitimate, charging a fee to authors desperate to boost their careers...

It is demonstrating a new and wildly profitable model for predatory journals. Instead of running a cheap startup website and hunting for clients, it took over the identity — and readership — of an established business.

This is paying off spectacularly. Experimental & Clinical Cardiology published 142 articles in July alone, worth a total of \$170,000 U.S. for one month. It operates online only and doesn’t bother with editing, so it has almost no costs.” See

<http://ottawacitizen.com/technology/science/respected-medical-journal-turns-to-dark-side>

On 5th September 2014, our late colleague Peter Stambrook emailed the Board to say that: *“I believe that the link below represents a new twist on an old concern regarding predatory journals. In this case, the journal Experimental & Clinical Cardiology, which is indexed in Scopus, has been bought and is being peddled by a predatory publisher, apparently with enormous financial profits. For the credibility of Scopus, we should make a practice of immediately delisting such journals”.*

Wim Meester provided a thoughtful and detailed response for the Board on 8th September 2014. This effectively benchmarked the start of the SCOPUS Title Re-Evaluation Programme. He wrote:

“I think this is an excellent example of the effect a (predatory) publisher can have on the performance of a journal in a database like Scopus. This journal had around 60 articles published per year and a decent diversity of authors publishing in the journal. After the take-over by the other publisher, the number of articles published in the journal grows exponentially to 539 articles YTD in 2014 and the majority of authors coming from one country (China).

Although this is a clear red flag, with >20K journals included in Scopus it is very difficult to monitor. However, examples like this help us to define what bad performance of a journal is and develop measures to detect it. However, much of this (malpractice) is only visible some time after the fact. This journal changed ownership last year and only now – a year later – one can see the unsustainable growth of research articles. While I have no doubt the scientific quality will be poor, decent measurement of the citation impact of the articles can only be done a couple of years later. Therefore we need our users, the scientific community and also you to alert us on these incidents when you see this happening.

We are working on ways to detect these effects in Scopus. In Amsterdam that I showed a preliminary analysis to detect unsustainable article growth in Scopus.

This journal would not have been detected this way, because the analysis only included growth rate over 2008 – 2012. We are therefore also working on a tool that can detect these types of journal performance (sudden growth, change and poor geographic diversity) automatically and much faster. Hopefully we can show the early results of this radar at our next meeting in October (2014)”.

Wim also observed that:

“Re-evaluation has been on the CSAB agenda for a couple of years now. We think it is an important issue, a lot is happening and we are making progress...

- *We are not afraid to discontinue titles in Scopus if there is a good reason to do so.*
- *We should not restrict ourselves to the STEP system for re-evaluation:*
- *Journals may change after being selected for Scopus.*
- *The records in STEP are only snap shots of a journal and its performance.*
- *We have already caught some badly performing journals and publishers*
- *We have posted a list of (~20) such titles*
- *Unexplained growth and lack of diversity are also reasons to discontinue journals.”*

He noted that in some countries, researchers only obtain their PhD if they have published in journals which have a Scopus (or Web of Science) listing. Subverted journals provide a way to secure article indexing in Scopus for this purpose.

He also noted that with the prevailing technology,

“We cannot (yet) review each of +20K titles in Scopus title-by-title and therefore we need metrics to assign red flags and identify titles for detailed re-evaluation.

Using actual examples of poorly performing journals and the feedback that we have received from you in the meetings in Nice, Rio and Amsterdam, we have a better idea of how we can develop the metrics and identify and track the performance of journals in order to assign red flags. These titles will be supplied to you to review and decide to continue coverage or not. We will present some proposals in Singapore.”

The PubMed Central records indicate that publication of the journal was discontinued as of 2013. Of course, it is possible that the individuals behind the profitable scam regrouped and have re-emerged elsewhere, wiser and sharper, but we had no tools at the time to track such elements.

In similar vein, Peter Miller (CSAB Behavioural Sciences) notified us on 1st October 2014 that *“Jeffrey Beall recently told me that some of his predatory publishers are setting up websites that duplicate reputable open access journals (using the same name and information) and then solicit articles for submission. I'm not sure what our group can do about this but we should be aware of it and perhaps discuss it”.*

The CSAB meeting in Singapore 29th - 31st of October 2014

We next met as a Board in Singapore in late October 2014. The agenda included:

- A presentation by Dr Michael Khor on research information workflow management at Nanyang Technical University (NTU) Singapore;
- Policy on the re-evaluation metrics and thresholds;
- Policy on the terminology and understanding of journal Review Decisions;
- Feedback from a meeting with Jeffrey Beall on Publication Ethics;
- Policy updates on Book, Patent and Conference record collections;
- The policy to extend and enrich citation data from 1996 back to 1970;
- Updates on the Research Intelligence Portfolios of the SciVal and Pure products;
- Publisher information of value to the STEP process.

The work of the SCOPUS CSAB in 2015

The Subject Chairs meeting, St Petersburg, Russia. 27th – 29th May 2015

Our next meeting was held in St Petersburg in late May 2015. Russia was viewed as an important market for SCOPUS, and Russian research institutes were investing in the quality of their research outputs to improve their recognition in the global rankings.

The newly formed Russian local advisory board had organised a parallel conference at the Azimut Hotel in St Petersburg, to facilitate a meeting and interaction between the CSAB and the Russian board. Olga Kirillova, the coordinator of the Russian Board, organised a conference with 500 local journal editors in parallel with the CSAB meeting. Wim Meester noted that from previous experience of the Russian editor conference, the attendees would appreciate the opportunity to speak with CSAB members and Scopus staff in person.

Peter Miller, Karen Holland and I were invited to speak in general terms about the work of the SCOPUS CSAB to Olga's conference on Tuesday 26th May and subsequently to hold an informal seminar with Russian Editors at the Azimut Conference Centre. Olga informed me that the project had state support with a view to promote 30 selected journals to global databases, including Scopus.

The main Board meeting took place at the Astoria Hotel in our usual format. Discussion of policy-related topics included the Elsevier Journal Metrics strategy, journal re-evaluation, and publication ethics and malpractice. Local speakers discussed the reform strategy for the Russian Academy of Sciences, and research assessment at St. Petersburg State University.

One of the interesting discussions that arose from conversations with Russian Board members related to the transliteration and translation of Russian titles into English, in keeping with our English Language policy. My own belief is that in general terms, journal titles are best chosen which clearly identify the national or institutional origins and the precise subject focus of the journal, as for example, the British Medical Journal or the New England Journal of Medicine.

If it is impractical to adapt a translated title in this way, then the journal should carry a clarifying subtitle on the journal masthead, website and correspondence as to its origins and purpose. In the final analysis, the quality of a journal is determined by the editorial leadership in recruiting good material and in optimising the presentation of original work, and the title should generate pride for editors and publishers in the roots of their journal.

Correspondence with a Russian Board member raised a recurring problem around title selection, as follows:

"I have doubts about the "Russian" identifier. If our journals are going to have the really international impact and want to have the international board or council, may be this word will be scare away authors and readers?"

I know one situation: when we decided to publish electronic journal in English on the ScienceDirect website and proposed the title Russian Journal of Electronic Materials, the Elsevier's manager did recommend us to use a more international, independence title, as, for example, Modern Electronic Materials, avoiding word "Russian". They think that the regional title of the journal narrows the reading and author auditory. What do you think about this?"

My personal view was that the editorial manager's advice ran contrary to my own, and that it highlighted the general publishing trend to bland and obfuscatory titles. I suspect that I had lost the argument in the short term, but I will return to it in a separate essay in this series. My discussant also wrote:

"Please, give me advice in this example. We have the journal "Pul'monologiya". What will be the best title in English - Pneumology; Respiratory Medicine; Respiratory Diseases or Russian Journal of Respiratory Medicine (or Diseases)?"

My own opinion was strongly in favour of the underlined option.

Throughout our time, our Russian hosts proved to be generous in their appreciation of our contributions, hospitable and very keen to engage and learn from our experience and insights into publishing.

Professor Narongrit Sombatsompop, founder of the Thai Board, wrote to say that:

“ I have been so pleased to be in the CSAB meeting in St. Petersburg and I have gained so many insights from the CSAB members. These will be useful for improvements of the qualities of local journals in Thailand, and of other related/similar cases in other regions, especially ASEAN where I am involved as the Chairman of ASEAN Citation Index (ACI) database. I hope that Russian SAB will turn out as expected.”

Journal Metrics and the Introduction of the Citescore Metric

The Citescore metric was introduced by Elsevier in early 2015, to make better use of SCOPUS data and to free Elsevier from the legal constraints of use of the Impact Factor.

Wim Meester described the new policy on bibliometrics in an extended response to a blog post by Phil Davis in The Scholarly Kitchen on June 9th, 2015 under the title “Data Curation: The New Killer App”. Wim wrote:

“At Scopus we currently have three journal metrics:

- *The SCImago Journal Rank (SJR),*
- *The Impact per Publication (IPP) and*
- *The Source Normalized Impact per Paper (SNIP).*

The algorithms of these metrics are different but they all use the number of papers and the number of citations to these papers as input. Besides the algorithm itself, there are two main differences with the approach of the Impact Factor, in that:

1. We use the document types Article, Review and Conference Paper both as the source of citations and as citable items (article type consistency) and

2. We use a citation window of three years instead of two years in the Impact Factor (IF).

We find that the three year citation window is the most fair compromise for catching the citation peak in all different subject fields represented in Scopus.

The IPP *is the simplest journal metric. It uses a citation window of three years and counting the number of citations from all Article, Review and Conference Papers to the same document types published in a particular journal, divided by the number of Article, Review and Conference Papers published in that journal.*

The IPP is analogous to the IF in depending on unweighted citation counting, but it differs because it is a mathematical average rather than a ratio.

***SNIP** is the field normalized version of the IPP in which the IPP is divided by the Citation Potential of that journal in its field.*

***The Citation Potential** and subject field are determined by the citation behaviour of the journal itself.*

***The SJR** is a prestige metric which is based on the idea that all citations are not created equal. This means that the weight of the citations received by the journal depends on where the citation is coming from. In effect, it says that a citation from an influential journal confers more influence on the cited journal. The result is an iterative, convergent calculation that is a distant relative of Google Page Rank.*

Each metric has its advantages, and that is why we use all of them and more to talk about the role a journal plays in the literature (the “basket of metrics”).

This leads to the rather complicated question of “what is an ‘article’ really?” since “article” is in all the denominators and can make or break an Impact Factor”.

[<http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.0030291>].

Wim noted that Thomson Reuters uses an artisanal process based on expert review of the journal content and category-level assignment of document types: He went on to say that: *“We chose a fundamentally different approach that was available to us precisely because we were using the same content in the numerator as in that all-critical denominator (article type consistency). For the Scopus journal metrics “article” means the content classified in Scopus as Article, Review or Conference Paper. We use the classification by the original publisher for this in combination with general document type rules.*

It could be argued there is some incentive for the publisher to falsely deflate that count by tagging inaccurately, should they attempt to re-direct some content away from the denominator, the numerator also loses the citations that content gets and the average remains focussed.

(see: <http://jama.jamanetwork.com/article.aspx?articleid=184527>).

We also find that the metrics differ depending on which data source you use. When applying the IF algorithm to the Scopus database (restricting to sources only covered in the Clarivate Journal Citation Reports, JCR) the actual values of the metric are much different from the IFs published by Thomson Reuters.

We believe that the main reason for this is the question of what is considered an article or citable document by each of the databases. The two different approaches are not necessarily right or wrong, it just reconfirms the fact that these databases are constructed differently and therefore will result in different outcomes.

It is not necessary to resurface the entrenched arguments over each approach. They are analogous, but not alike. Users are free to choose the metrics that provide the insight they need for the task at hand.”

DOCUMENT AUTHOR JOURNAL			<small>*Document* in the definitions refers to primary document types such as journal articles, books and conference papers. See Scopus Content Coverage Guide (page 9) for a full list of document types: https://goo.gl/bLYHov <small>Indicates that the Snowball Metric group agreed to include as a standardized metric, which is data source and system agnostic. https://www.snowballmetrics.com</small> </small>
<p>CITATION COUNT # of citations accrued since publication</p> <p>A simple measure of attention for a particular article, journal or researcher. As with all citation-based measures, it is important to be aware of citation practices. The paper "Effective Strategies for Increasing Citation Frequency" lists 33 different ways to increase citations.</p>	<p>DOCUMENT COUNT # of items published by an individual or group of individuals</p> <p>A researcher using document count should also provide a list of document titles with links. If authors use an ORCID ID → a persistent scholarly identifier – they can draw on numerous sources for document count including Scopus, ResearcherID, Crossref and Publons. Register for an ORCID ID at http://orcid.org.</p>	<p>FIELD-WEIGHTED CITATION IMPACT (FWCI) # of citations received by a document expected # of citations for similar documents</p> <p>Similar documents are ones in the same discipline, of the same type (e.g., article, letter, review) and of the same age. An FWCI of 2 means that the output performs just as expected against the global average. More than 1 means that the output is more cited than expected according to the global average; for example, 1.48 means 48% more cited than expected.</p>	
<p>h-INDEX # of articles in the collection (h) that have received at least (h) citations over the whole period</p> <p>For example, an h-index of 8 means that 8 of the collection's articles have each received at least 8 citations. h-index is not skewed by a single highly-cited paper, nor by a large number of poorly cited documents. This flexible measure can be applied to any collection of citable documents. Related h-type indices emphasize other factors, such as newness or citing outputs' own citation counts.</p>	<p>CITESCORE citations in a year to documents published in previous 3 years # of documents in previous 3 years</p> <p>This comprehensive, current and open metric for journal citation impact (introduced in December 2005) is available in a free layer of Scopus.com. It includes a yearly release and monthly CiteScore Tracker updates. Find CiteScore metrics for journals, conference proceedings, book series and trade journals at https://www.scopus.com/sources</p>	<p>SCIMAGO JOURNAL RANK (SJR) average # of weighted citations received in a year # of documents published in previous 3 years</p> <p>Citations are weighted – worth more or less – depending on the source they come from. The subject field, quality and reputation of the journal have a direct effect on the value of a citation. Can be applied to journals, book series and conference proceedings. Calculated by SCImago Lab (http://www.scimago.com) based on Scopus data.</p>	
<p>SOURCE NORMALIZED IMPACT PER PAPER (SNIP) Journal's citation count per paper citation potential in its subject field</p> <p>The impact of a single citation will have a higher value in subject areas where citations are less likely, and vice versa. Stability intervals indicate the reliability of the score. Smaller journals tend to have wider stability intervals than larger journals. Calculated by CWTS (http://www.journalindicators.com) based on Scopus data.</p>	<p>JOURNAL IMPACT FACTOR citations in a year to documents published in previous 2 years # of citable items in previous 2 years</p> <p>Based on Web of Science data, this metric is updated once a year and traditionally released in June following the year of coverage as part of the Journal Citation Reports® JCR also includes a Five-year Impact Factor.</p>	<p>PERCENTILE BENCHMARK (ARTICLES) compares items of same age, subject area # document type over an 18-month window</p> <p>The higher the percentile benchmark, the better. This is available in Scopus for citations, and also for Mendeley readership and tweets. Particularly useful for authors as a way to contextualize citation counts for journal articles as an indicator of academic impact.</p>	
<p>OUTPUTS IN TOP PERCENTILES extent to which a research entity's documents are present in the most-cited percentiles of a data universe</p> <p>Found within ScVal, Outputs in Top Percentiles can be field weighted. It indicates how many articles are in the top 5%, 5%, 10% or 25% of the most cited documents. Quick way to benchmark groups of researchers.</p>	<p>SCHOLARLY ACTIVITY ONLINE # of users who added an article into their personal scholarly collaboration network library</p> <p>The website How Can I Share It? links to publisher sharing policies, voluntary principles for article sharing on scholarly collaboration networks, and places to share that endorse these principles, including Mendeley, Figshare, SSRN and others. http://www.howcanishareit.com</p>	<p>SCHOLARLY COMMENTARY ONLINE # of mentions in scientific blogs and/or academic websites</p> <p>Investigating beyond the court to actual mentions by scholars could uncover possible future research collaborators or opportunities to add to the promotion and tenure portfolio. These mentions can be found in the Scopus Article Metrics module and within free and subscription altmetric tools and services.</p>	
<p>SOCIAL ACTIVITY ONLINE # of mentions on micro-blogging sites</p> <p>Micro-blogging sites may include Twitter, Facebook, Google+ and others. Reporting on this attention is becoming more common in academic CVs as a way to supplement traditional citation-based metrics, which may take years to accumulate. They may also be open to gaming?</p>	<p>MEDIA MENTIONS # of mentions in mass or popular media</p> <p>Media mentions are valued indicators of social impact as they often highlight the potential impact of the research on society. Sources could include an institution's press clipping service or an altmetric provider. Mendeley, Scopus (Article Metrics module), Pure and ScVal also report on mass media.</p>	<p>1. Metrics selected will depend on the funder's interests and project strengths. 2. Plume, A. & Kamalok, J. (March 2014), "Article downloads: An alternative indicator of national research impact and cross-sector knowledge exchange," Research Trends, http://www.researchtrends.com/issue-36-march-2014/article-downloads/ 3. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=244595 4. See a good explanation at http://www.harzing.com/pep_hindex.htm 5. http://www.altmetric.com/blog/gaming-altmetrics/</p> <p><small>Y3.0_researcher_decade CC for Quick Reference Cards: Elsevier, Scopus, ScVal, Mendeley, Pure and other Elsevier trademarks are the property of Elsevier B.V. and its affiliates. Other trademarks, including the SNIP and SJR icons, are the property of their respective owners.</small></p>	

Figure: 7 The Librarian’s Quick Reference Card for the “Basket of Metrics”, Elsevier 2016

The Subject Chair meeting in Washington DC, 4th - 6th November 2015

The Autumn meeting in 2015 was held at the Mandarin Oriental hotel in Washington. Topics covered included:

- A review of the Scopus selection criteria and mapping of the STEP process;
- The Elsevier Journal Metrics strategy;
- The introduction to the Citescore journal metric;
- The concept of the comprehensive “Basket of Metrics”;
- Workflow proposals for the Re-evaluation project ;
- Discussions on Review decisions;
- Implementation of the “two year rule” (embargo for new journals);
- Publisher information.

Malpractice Detection and the New SCOPUS RADAR system

Susanne Steiginga of Elsevier introduced the new Scopus Radar system, which was the brainchild and wunderkind of her colleague Thierry Delbeque. SCOPUS Radar is a bespoke and continuously evolving set of data analytics algorithms which continuously scan the SCOPUS.com data set to monitor and identify indexed journals that exhibit "Outlier Performance". This in turn may indicate a significant change in quality, ethical violations, aberrant manuscript flow, citation and authorship malpractice.

As such, SCOPUS Radar offered a major step forwards in malpractice detection using wider parameters. I have described the development of SCOPUS Radar in greater detail elsewhere See <https://eprints.soton.ac.uk/507702/>.

We discussed at length the measurable criteria that might indicate that a journal had “gone bad”, such as to justify re-evaluation. We agreed a process in which the human element in the form of Subject Chair review would be a key element in any final adjudication.

We also enjoyed a presentation from James Onken, of the National Institutes of Health (NIH), on “Improving the Research Portfolio Data Infrastructure” at the NIH.

Policy Development on Scientific Integrity and Article Retraction

IJsbrand Jan Aalbersberg, of Elsevier, discussed the work of his team in promoting the importance of Scientific Integrity. He highlighted the Publishing Ethics section and the statement on Editorial Independence on the Elsevier website, which of 2025 is now at <https://www.elsevier.com/en-gb/about/policies-and-standards/publishing-ethics>

He also addressed the growing challenge of article retractions for various violations of probity, and the distribution of retractions per discipline. He highlighted an article by Grieneisen and Minghua Zhang in on “A Comprehensive Survey of Retracted Articles from the Scholarly Literature”. PLoS ONE 7(10): doi.org/10.1371/journal.pone.0044118

These authors had noted that “the number of retracted scholarly articles had risen precipitously in recent years. Past surveys of the retracted literature had limited their scope to articles in PubMed. They therefore surveyed 42 of the largest bibliographic databases for major scholarly fields and publisher websites to identify retracted articles.

They found that 4,449 scholarly articles had been retracted between 1928 and 2011. The percentages of retractions in Medicine, Life Science and Chemistry were much higher than those in Maths, Physics, Engineering and Social Sciences, as evidenced from Web of Science (WoS) records. Fifteen prolific individuals accounted for more than half of all retractions due to alleged research misconduct. The number of articles retracted per year increased by a factor of 19 from 2001 to 2010.

They concluded that retracted articles occur across the full spectrum of scholarly disciplines, but despite recent increases, the proportion of published scholarly literature affected by retraction remained very low. Better mechanisms were still needed for raising researchers’ awareness of the retracted literature in their field.

Since then, we have become aware of the evidence of growing and systematic fraud in academic publication on an industrial scale, including Paper Mills, Authorship and citation cartels, hidden references in the article metadata, and many other techniques. Our

awareness and detection systems continue to evolve, but the Washington meeting marked a key stage in the evolution of our strategies to address publication fraud.

The Massive Analysis Project for Academic Libraries

Galadriel Chilton, then of the University of Connecticut, introduced us to the “MAPing Library Resources Using Massive Amounts of Data for Collection Analysis” project.

Collection Mapping is an important modern tool of librarianship to understand the dynamics of the use of large document and information collections, and its functions extend well beyond cataloguing. It is well explained by Mary C. Bushing in a paper titled *Collection mapping: - An Evolving Tool for Better Resources and Better Access* in Issue 3:2006 of the magazine SIGNUM, which was published in English by the Finnish Scientific Library Society (see <https://hamk.finna.fi/Record/journalfi.article3386>)

Mary Bushing noted that “Whatever the digital tool, the “picture” of resources that results enables libraries to adjust their holdings to better meet their missions, while also enabling us to streamline access to information without being tied to bibliographic tags with subject and discipline gateways. Its usefulness depends upon the thoughtful and appropriate application by the practitioner.

Collection mapping provides a broad range of operations and techniques to achieve the degree of informed collection understanding necessary in any given circumstances. It is a process which provides statistical information and which defines the broad character of a collection of information and literary resources; but which also requires informed human judgments”.

Galadriel also told us how in 2014, his team had analysed Scopus, Web of Science, and Google Scholar data to better understand their use in the wider context of academic library custodianship. He subsequently published an e-book through Pacific University Press in 2020 on “Managing Licensed e-resources”, ISBN (epub) 978-1-945398-10-0; ISBN (PDF) 978-1-945398-12-4, which was linked to the US Library Bill of Rights, stating that:

“Managing e-resources is the work necessary to ensure that online content—most specifically, the subscriptions and purchases of databases and electronic content (eg, serials, e-books, etc.) by a library, consortia, or government entity, as well as collected open access content—is acquired, accessible, marketed, evaluated, and renewed or canceled as appropriate to the organization’s user community”.

The work of the SCOPUS CSAB in 2016

The Subject Chairs meeting in Warsaw, Poland, 25th-27th May 2016

This meeting was preceded by a seminar to Journal Editors at the University of Warsaw on Tuesday 24th May. The programme attracted some 80 attendees:

The main Board meeting took place at the Intercontinental Hotel in Warsaw.

- Dasha Karzunina of Quacquarelli Symonds (QS), the higher education analytics firm, discussed the Audience, Impact & Implications of the widely used QS Rankings, and the contribution of SCOPUS to the QS data sets.
- Wim Meester Introduced the new journal metric CiteScore. Citescore was a journal performance metric with similarities to the WoS Impact Factor, but it was unique to Elsevier and which freed Elsevier from the legal constraints in the use of the IF.
- Judy Salk & Jörg Rudiger-Sack discussed ongoing challenges and policies around Conferences and the validation of conference outputs for listing in SCOPUS.
- In Breakout sessions, we examined challenges in the normalization of the CSAB journal review process in STEP.

The Subject Chairs meeting on 2nd -4th November 2016 in Toronto, Canada

The autumn meeting in 2016 took place at the Fairmont Royal York Hotel in Toronto.

The meeting covered our standing agenda of issues around the evolution of STEP, of journal re-evaluation, and the challenges of journal review both for Board members and the Elsevier SCOPUS admin team.

Judy Salk and Jorg Sack introduced us to the initiative known as Countermock to combat predatory and fake conferences, which were a rapidly growing phenomenon. (see eg:

Stone, T., & Rossiter, R. (2016). “Buyer Beware!” predatory conferences: Avoiding an expensive mistake. *Nursing and Health Sciences*, 18(4), 414–15; doi.org/10.1111/nhs.12318

Grégoire Côte spoke about his company, Science-Metrix, which provides bibliometric, research and evaluation inputs for a wide range of organisations.

Essay Summary

In this essay, I have described the development and adaptation of policy and of the supporting technical and operational systems of the SCOPUS Content Selection Advisory Board through 2012 to 2016. In addition to a wide range of policy discussions and decisions, highlights of this period included:

The development of the Thai, Russian and Korean Advisory Boards;

The development of the concept of the Basket of Metrics

The development of the SCOPUS Title Re-evaluation process.

The introduction of the SCOPUS Radar system

In the next essay in this series, I describe the work of the Board on policy development from 2017-2019.

Acknowledgements

I am grateful to many colleagues for discussions and insights in this subject during my tenure as the Subject Chair for Medicine for the SCOPUS CSAB over two decades.

I am also grateful to Professor Julie Cullen of the University of Southampton for proofreading and comments during the preparation of the manuscript.

The recollections and opinions in this essay are my own. They should not be construed as representing the corporate views, policies or intent of Elsevier BV.

References

Selected References to other working papers by the author in this series, all of which have been generously published on the University of Southampton ePrints server, include:

Preparation for Editorship of the EJSO, 1996-2002:

<https://eprints.soton.ac.uk/502916>

Rew DA. Editorship of the European Journal of Surgical Oncology (EJSO), 2003 to 2009

<https://eprints.soton.ac.uk/501604>

Rew DA. "The Complex Universe of Citation Data for Bibliometric Systems"

<https://eprints.soton.ac.uk/502914/>

Rew DA and Lehman M. An Audit of Correlation of the MEDLINE and Scopus Evaluation Systems for the Quality Assurance of Academic Healthcare Journals

<https://eprints.soton.ac.uk/502915>

Rew DA. "The Case for the Evolution of the All Sciences Journal Classification (ASJC) System"

<https://eprints.soton.ac.uk/504370>

Rew DA. "Trust, quality assurance and the classification of academic publishers"

<https://eprints.soton.ac.uk/504371/>

Rew, DA (2025) *The Evolution of the SCOPUS Title Evaluation Platform (STEP), 2010 to 2025* 39pp.

<https://eprints.soton.ac.uk/507702/>

Rew DA. The Development of the SCOPUS Content Selection Advisory Board, 2003-2009

<https://eprints.soton.ac.uk/507668/>

Rew, David (2026) *The development of policy for the SCOPUS Citation System Part 1: the work of the Content Selection Advisory Board 2010-2011* (Essays on the Adjudication of Quality in the Global Academic Literature) University of Southampton 40pp.

<https://eprints.soton.ac.uk/508986/>