



2019

Strategic Review of the Irish Research e-Library (IReL)

REPORT

IREL REVIEW STEERING GROUP

HEA | AN tÚDARÁS um ARD-OIDEACHAS
HIGHER EDUCATION AUTHORITY

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1. About this Report

This is the report of the Steering Group, chaired by the Higher Education Authority, that was invited to oversee an independent Strategic Review of the Irish Research e-Library (IREL). IREL is a nationally funded online research library, providing access to quality peer-reviewed online research publications, including journals, databases and index & abstracting services, as well as e-books, for academics, researchers and students in member institutions.

The review was managed by the HEA, at the request of the Governance Committee of the Irish University Libraries Collaboration Centre (IULCC), with independent consultants contracted to conduct the Review. This report considers information gathered by the consultants, assessing whether IREL has delivered value for money to date and examining issues identified through international case studies and stakeholder consultation, impacting on the academic publishing sector, IREL's operations and the wider research system. The report examines options for the future development of IREL and highlights some areas for future consideration at a national level.

1.1 Members of the Steering Group

Dr. Gemma Irvine, Higher Education Authority (Chair)

Mr. Tim Cullinane, Department of Education and Skills

Mr. Marcus Breathnach, Department of Business, Enterprise and Innovation

Dr. Joe Ryan, Technological Higher Education Association

Dr. Philip Cohen, Technological Higher Education Association

Mr Cathal McCauley, Maynooth University

Mr Liam Cleere, University College Dublin

Ms. Janet Peters, Cardiff University

Mr. Robert Van der Vooren, Independent Consultant, Netherlands

1.2 Contributors of content for the Steering Group's consideration

BH Associates: Review of Options for a Future National Approach to Journal Subscriptions.

Mazars: Report on an Assessment of whether the Irish Research e-Library delivers Value for Money.

2. Introduction

2.1 Background and Context

The Irish Research eLibrary (IReL), is a nationally funded online research library, providing access to quality peer-reviewed online research publications, including journals, databases and index & abstracting services, as well as ebooks, for member institutions. Initially established in 2004, IReL was expanded to serve the 7 Irish universities, the RCSI and, for a limited number of resources, the Institutes of Technology (IoTs) from 2008. Dublin Institute of Technology (now Technological University Dublin City Campus) recently joined IReL in mid-2018. This higher education shared service is managed by the Irish University Libraries Collaboration Centre (IULCC).

The IULCC is interested in ensuring that IReL continues to offer excellent services and value for money (VFM) in the provision of research e-resources on a sustainable basis and has received various requests from research performing organisations to join the IReL consortium. The context for academic publishing is also shifting, with European Commission policy and emerging national policy relating to Open Access to publications by 2020 to the fore. Given this dynamic context, the IULCC identified that a strategic review of IReL would be of benefit in helping to identify strategic options for the future of IReL.

At the IULCC's request, the Higher Education Authority (HEA) initiated and agreed to manage this independent review, with oversight from a Steering Group. The Steering Group's membership comprised:

- Head of Policy and Strategic Planning, HEA (Chair);
- One nominee from the Department of Education and Skills (DES)
- One nominee from the Department of Business, Enterprise and Innovation (DBEI)
- Two nominees of the Irish Universities Association;
- Two nominees of the Technological Higher Education Association;
- Two international e-library experts.

The Steering Group agreed the Terms of Reference for the review at their first meeting in April 2018. It was also agreed that independent consultants would undertake a number of work packages to inform the review (Mazars and BH Associates were subsequently contracted).

The objectives of the Review were to:

- a) Analyse the resources currently purchased by IReL with regard to their value-for-money and their continued relevance to institutional and national research priorities;
- b) Review the current costing structure for IReL membership and assess the optimal cost structure for its future, in particular with regard to the inclusion of new members;
- c) Evaluate the options and impact of alternative business models for IReL subscriptions in the context of Open Access and emerging trends internationally;
- d) Examine the implications of IReL becoming a national research consortium with membership over and above the Higher Education Institutions;
- e) Evaluate the research implications, financial and otherwise, of potential changes to existing operational processes and/or membership of IReL;
- f) Assess the potential policy and other changes (e.g. broad legislative considerations in relation to content) that may be required for IReL to develop its resources further;
- g) Make recommendations regarding how the above challenges can be addressed while maintaining the research focus of the IReL initiative and ensuring that the needs of researchers continue to be prioritised.

The Steering Group met six times between April 2018 and March 2019 to discuss the process for the Review and inputs from the independent consultants as their work progressed. This report is a culmination of these discussions and sets out the Steering Group's recommendations for a national approach to e-Journal subscriptions and the future of IReL, alongside some areas identified for further consideration at a national level.

2.2 Evidence Overview

The Steering Group commissioned two reports from independent consultants to inform this review: a) an assessment of whether IReL delivers VFM and b) a review of options for a future

national approach to journal subscriptions. The HEA informed government departments, research performing organisations and academic publishers of the review and prepared a Public Information note for wider circulation within the research community at the outset. Evidence to inform the review was subsequently gathered from a wide range of stakeholders via surveys, focus groups, interviews, case studies, submissions, and desk research. Included in the consultation processes were academics, researchers, librarians, postgraduate students, professional and support staff, government departments, research performing organisations, research funders and international experts. There were 2,565 respondents to the survey of academics and researchers; 31 responses to the institutional survey; over 30 people participating in interviews/focus groups; and 3 submissions from government departments/research performing agencies. Twenty-four higher education institutions (HEIs) completed data returns to inform the value for money assessment. International case studies focused on five comparator countries, namely Australia, Netherlands, United Kingdom, Scotland and Sweden.

3. Research Findings and Analysis

3.1 Key findings of the Value for Money Review

Mazars completed a VFM assessment of IReL, against five individual VFM indicators: Organisational VFM; Purchasing VFM; Higher Education Institution VFM; Researcher VFM; and State VFM.

A key overall conclusion was that *“purchasing practices in IReL result in improved value for money”*. It was found that there is a benefit of having a single entity negotiating with publishers rather than individual HEIs negotiating separately. During the review period, *“although pricing is following the same trend, price increases being experienced by IReL members are lower than those being experienced by non-IReL members”*. The Review also clearly highlighted IReL’s operational efficiency, giving reassurance to funders and the broader research system of a lean operation. State VFM could be improved by facilitating all Irish HEIs to join IReL, so that they could also benefit from the advantages experienced by IReL Members.

It was also found that IReL members are spending significant amounts on e-resources outside of IReL, indicating that they need to access resources outside of the IReL catalogue. Non-IReL members are not paying to use all of the resources in the IReL catalogue. These two issues indicate that a review of the overall IReL catalogue would be of benefit at this juncture. Mazars note that: *“It would be preferable to channel the majority of expenditure through IReL where economies of scale can be achieved and where certainty of resource availability can be provided”*.

The following are additional key findings and conclusions:

VFM Indicator	Findings
Organisational VFM	<ul style="list-style-type: none"> – Good financial management by IReL was evident. – IReL’s overhead expenditure was minimal. The organisation benefits from being situated in-house with one of their partner institutions. – Over the review period, the main risk to IReL’s financial stability arose from exchange rate volatility, as some publishers bill IReL in foreign currencies. <p>Potential improvements could be made around:</p> <ul style="list-style-type: none"> – Aligning the IReL budgeting schedule with the timeline for the government estimates process; – Continuing to mitigate exchange rate risk by leveraging the financial expertise within the Maynooth Finance Office and/or negotiating to pay in Euros.
Purchasing VFM	<ul style="list-style-type: none"> – Publisher negotiations undertaken by IReL deliver value for money. IReL negotiated average price increases over the period, which compare favourably to average increases internationally.
Higher Education Institution VFM	<ul style="list-style-type: none"> – IReL represents good value for money for its members given that their membership cost is broadly reflective of their size and their usage of resources.

Researcher VFM	<ul style="list-style-type: none"> – Due to a lack of correlating data it was not possible for Mazars to explore the extent of a tangible link between the research being completed and IReL membership.
State VFM	<p>IReL offers value for money from a State perspective given that as an organisation, it delivers a significant resource catalogue to its members whilst:</p> <ul style="list-style-type: none"> – Operating efficiently and effectively; – Delivering price variances that are less than market averages; – Providing certainty of access to resources for student FTEs, academics and researchers of member institutions where they do not have to compete with other priorities for funding; – Offering significant savings to HEIs from a procurement perspective.

3.2 Key findings from stakeholder consultations

The following are the key messages arising from the stakeholder consultations, identified in the BH Associates report:

IReL is considered by all stakeholders to be an important and effective part of the infrastructure of higher education and research, and a significant factor in building up Ireland’s education and research base and international reputation. The service is also recognised as a valuable support for teaching and learning, as students can access journals and other resources to support their studies.

In terms of the benefits of IReL membership, there is a widely held view that IReL has had success in holding down costs (which was confirmed by the VFM assessment). However, the strength of position of large academic publishers creates an unequal negotiating relationship with IReL. Due to rising subscription costs and funding restrictions within the higher education sector over the period of the review, IReL has not been in a position to keep pace with rising demand for e-journals and resources or to expand the IReL catalogue. “Work-arounds”, such

as inter-library loans, are increasingly being employed by academics concerned at the cost of access to journals that are not available through IReL or their institution.

To date, the IoT sector has only had access to a limited set of resources through IReL, and this has been a significant issue for this sector. Other research performing organisations have also expressed keen interest in joining the consortium to benefit from anticipated economies of scale and the time-saving/opportunity cost associated with individually managing negotiations. Arising from this interest in expanding the IReL consortium, there is strong support for a new funding and operational model, as the existing cost model is based on legacy arrangements. It was suggested that a new funding model should reflect equitable cost sharing, with reasonable regard to levels of usage.

Stakeholders indicated that the movement towards Open Access offers a way forward, however some cautioned that, as an evolving policy area, there remain uncertainties in relation to cost and other implications during the transition. For example, the academic community is currently tied into an academic/research culture and career progression system, which rewards publishing in highly-cited (HiCi) peer reviewed journals. European policy on Open Access, and the emergence of Plan S, challenges this dominant research culture (see Appendix iii). Open Access is therefore not viewed as a panacea to challenges identified earlier.

3.3 International Context: Key findings

BH Associates prepared International case studies focusing on five comparator countries: Australia, Netherlands, United Kingdom, Scotland and Sweden. Some further background information on international developments in academic publishing can be found in Appendix iv. Key issues and conclusions arising from the international case studies were identified as follows:

Consortia structure and membership:

- All countries have some form of consortium which negotiates directly with the publishers;

- The negotiating consortia usually operate as a sub-unit of the university librarians’ group or Rectors’ conference. The one exception is the UK, which has a dedicated independent agency established for digital access (JISC). The parent organisation maintains overall governance authority;
- Membership of the consortium varies, but always includes the research universities. Some countries, including Australia, the Netherlands, Scotland and Sweden, include polytechnics, national libraries and/or other research performing organisations (RPOs) in the consortium;

Consortia Objectives

Objectives of the consortia were broadly similar, however prioritisation of the objectives listed below varied across jurisdictions. Open Access is strongly supported by governments and universities.

- Widening access to e-journals and e-resources;
- Cost savings/VFM;
- Democratisation of access to knowledge beyond universities;
- Open Access/Open Research principles.

Publisher Negotiations

- Negotiations are usually led by librarians or Rectors. Scotland facilitates staff new to the negotiation process to “shadow” more experienced staff and gain experience;
- Negotiations with publishers can be very tough and prolonged. A key factor therefore is the strength of the funder mandates; in other words, the extent to which the collective academic/library community coalesces behind, and maintains, the negotiating stance;
- Countries have adopted different negotiating positions and are learning how to move beyond subscriptions to embrace Open Access. Publisher negotiations have included efforts to achieve Open Access at no additional cost, for example by flipping subscription costs to Open Access. The Netherlands has focused their negotiating attention on the largest academic publishers (covering c.a. 70% of the market).

- Agreement models vary from “all-in” to “buyers-club”. Some countries, such as the UK, allow sub-sets of institutions (e.g. in Scotland and Wales) to negotiate their own deals with the help of the consortium;
- Providing “formal” alternatives during the negotiating process, by way of inter-library loans or archival access, receives mixed reviews, as academics have their own “informal” channels. It is important to note that inter-library loans carry additional costs, as identified in the VFM report.

4. Guiding Principles

The following guiding principles were identified by BH Associates and have informed the recommendations in this report:

- *Democratisation of Knowledge.* For research, and the new knowledge it produces, to have significant impact it is important that it be accessible to as broad a public as possible. This is especially so in the case of research that has been funded from public funds. It is also important to ensure that the outcomes of research feed into public discourse and policy. The public should “own” that knowledge and there should be access to it from as wide a range of academics/researchers as possible, and beyond the higher education community to the wider public.
- *Broadening the range of e-journals and e-resources.* For almost a decade the resources available through IReL have remained static, notwithstanding the many thousands of resources that have become available from publishers in the interim. Reform should aim to redress this situation.
- *Open Access/Open Science.* While still in a developmental stage, the concepts underlying open access offer an avenue to achieving and optimising the democratisation of knowledge. An access policy needs to embrace open access to the greatest extent possible and allow for flexibility as open access practices develop internationally.
- *Reputation* – for education, research, and national competitiveness. Stakeholder feedback indicates broad consensus as to the very positive contribution that IReL has

made to bringing the Irish research system to its current stage of development in about two decades, from a near standing start by international standards. The further development of IReL, and as a result, wider access to more e-resources, will be a significant contributor to the next phase of development of our research system. Without high quality access to e-resources, Ireland would have difficulty in attracting researchers of international standing and in retaining those already in our system.

- *Governance.* IReL requires a governance system that guarantees continued responsiveness and accountability in the changed operational landscape and to ensure that IReL continues to be a key and effective component of the national research infrastructure.
- *Value for Money.* E-resources are expensive. Value for money in terms of overall cost and usage must be to the fore in any model.
- *Fair cost sharing.* The current cost-sharing arrangements have remained unchanged since the inception of IReL. As a national approach is adopted, it is appropriate to review the original model, with possible inclusion of a combination of research students and usage in the funding model. Consideration should also be given to the differing publishing practices and levels across and within RPOs, as new types of deals emerge over time in an Open Access context.
- *Sustainability.* Any model chosen must be sustainable within the context of institutional budgets that will always be very constrained.
- *Effectiveness.* Given the outcome of the VFM report on IReL to date, reform going forward should be undertaken without any dilution of its effectiveness.

5. Recommendations

In reviewing the findings of the Value for Money assessment by Mazars and the various options for the future identified by BH Associates in their report, the Steering Group has reached the following conclusions and recommendations:

5.1 National procurement of journals and e-resources

- Given the findings of the value for money assessment of IReL, it is recommended that procurement of e-journals at a national consortium level should continue and be expanded, as resources permit.
- Long term strategic aims should be clearly identified at a national level, to inform IReL's mission and Ireland's future negotiating strategy – negotiations in other countries have benefited from having clearly articulated principles. This should take account of evolving Open Access/Open Science policy, nationally and internationally.
- The Mission of IReL should be clearly defined for the future by the IReL Board, in consultation with the funders of IReL.
- In the context of a very fluid operational and policy environment for e-resources, Ireland should not take radical action unilaterally in the transition period from the current to a new system. However, Ireland should continue to keep a close eye on developments internationally and in/by the European Union, especially Plan S, and be ready to embrace wider system developments as soon as this is practicable.

5.2 IReL Membership

- Membership of IReL should be expanded on a phased basis, in line with the agreed Mission, to enable wider sharing of the benefits of consortium membership.
- Membership should initially be reformed and resourced to address the needs of Institutes of Technology/emerging Technological Universities, to ensure equity of access within HEA-funded HEIs.
- Membership could be expanded over time (if the Mission affirms this) to other publicly funded research performing organisations and public libraries, on a pay as you go basis.

5.3 IReL Funding model

- The IReL funding model should be reformed, underpinned by the principles of fair cost-sharing, value-for-money and sustainability. The model should be based on the number of FTE students but with a weighting for Research Masters and PhD students, as a proxy for usage. This will enhance transparency and simplify the process of bringing new members into the consortium over time.
- IReL should adopt a tiered-model ('all in' and 'buyer's club'), with different levels of access and associated costs, as not all HEIs/RPOs require access to the same breadth of resources.
- A review of the current IReL catalogue to consider the needs of current and potential new members is recommended, to identify the optimal configuration for the future.

5.4 IReL Governance Structure

- The objective of IReL's governance structure should be to guarantee continued responsiveness and accountability in the changed operational landscape and to ensure that IReL continues to be a key and effective component of the national research infrastructure.
- IReL's governance structure should flow from its mission i.e. depending on the composition of its membership. The structures should be simplified from the current arrangement.
- The IReL Board should move from a representative model to a competence-based model. The competences would include knowledge of the research environment in Ireland, competence in library management and financial management. A member from outside the jurisdiction with knowledge of academic publishing would be desirable as would a nominee from the funders (HEA/DES/DBEI). The board should continue to be chaired by a university president. A board of 10 to 12 members would be optimal and as it would be competence based there would be no reason to expand, or alter, membership as membership of IReL itself expanded.
- The role of the board would be to set the strategic direction of IReL, set the negotiating framework, and hold the executive accountable for delivering on the strategy, the overall operation of IReL and the management of its staff and resources.

- The board, as the ultimate governance body, needs to have ownership of the negotiating function with publishers and, especially, to agree broad strategy and the framework, including spending limits within which negotiations are to be conducted and agreement reached. However, it is not practical for a board to carry out negotiations or to have a meaningful role in agreeing on an outcome. It is recommended that the board appoint a negotiations committee or team(s), chaired by the Director of IReL, whose role would be to advise the board on the negotiating strategies and framework to be adopted, oversee and support the executive in negotiations and sign off on agreements reached, under a delegated authority from the board.
- Negotiating teams should include a mix of expertise including HEI Presidents/Vice Presidents of Research, library staff, procurement staff, and senior academic/research staff.
- It is recommended that an advisory committee to the board be established, comprising a mix of librarians and active researchers, with expertise to advise the Board on strategy and the general operation of IReL.
- The executive is responsible for the implementation of strategy set out by the board and the day-to-day operation of IReL. This includes monitoring the use of e-resources and conducting user surveys in relation to current and potential new resources.

5.5 IReL Staff Training and Development

- IReL staff should have access to increased professional training and support opportunities, especially with respect to negotiation techniques and strategies. This is not to diminish the clear success to-date of IReL staff, but it is recommended in light of the complex commercial publishing environment in which discussions about access to journals and Open Access is now taking place.

5.6 IReL's Potential Future Role and Remit

- The potential for IReL to assume a wider range of responsibilities and functions should be considered by its (new) board.

- Some possibilities for consideration (if in line with strategic aims identified at a national level) include IReL evolving over time to have a broader, national procurement function for the acquisition of all electronic research publications (when economies of scale can be achieved) on behalf of all public bodies and agencies within the wider higher education and research system. State agencies such as Teagasc, the Economic and Social Research Institute, and the Health Service Executive, could be incorporated on a phased basis.
- In this scenario, all HEIs and other publicly funded research performing organisations should be required to acquire resources through IReL. Further analysis of the feasibility of this and comprehensive management systems to underpin these developments would be required.

6. Additional areas for consideration at a National level

In addition to the recommendations outlined above, the Steering Group has identified various related issues for further consideration at a national level.

6.1 National spend on e-Resources

- Each HEI and RPO should establish appropriate data collection and accounting systems for usage, to enable a full accounting of the resources spent on publishing to be made and appropriate controls to be put in place.
- A comprehensive review at central government level may be of benefit, to identify, to the greatest extent practicable, how much public funding is being spent on subscriptions and e-resources across all RPOs and other public bodies purchasing from publishers. Such an exercise could be explored through the Innovation 2020 IDC.

6.2 Open Access

- The National Open Research Forum (NORF) has prepared a “*National Framework on the Transition to an Open Research Environment*”¹, which includes Open Access

¹ http://norf-ireland.net/wp-content/uploads/2019/05/National-Framework-for-transitioning-to-Open-Research_FINAL.pdf

principles. In pursuance of these objectives, there is merit in appointing a senior person in government with responsibility for Open Access, who can pursue the issue and liaise with the European Commission. NORF should also take steps to raise awareness among researchers, as part of a planned response.

6.3 Repositories

- National stakeholders should further consider the role of institutional, national and international repositories in meeting the Open Access challenge. Consideration of RIAN² should also be examined in this regard.

6.4 Researcher Career Structures

- Ireland should consider committing to implementing the San Francisco Declaration on Research Assessment³ (DORA) principles at a national level. This would be a positive step on the journey to shifting the research culture away from the current reliance on publishing in high impact factor journals for career progression.

² <http://rian.ie/en>

³ <https://sfdora.org/read/>

7. Appendices

i. List of Acronyms

DBEI	Department of Business, Enterprise and Innovation
DES	Department of Education and Skills
HEA	Higher Education Authority
HEI	Higher Education Institution, includes universities, colleges and Institutes of Technology
IoT	Institute of Technology
RCSI	Royal College of Surgeons, Ireland
RPO	Research Performing Organisation
VFM	Value for Money

ii. Definitions

- *All-in Model*: all members of a consortium pay an agreed amount based on criteria regardless of their actual usage; this a membership model.
- *Buyers-club model*: opt in/out for specific publishing negotiations/journals; essentially an a la carte approach.
- *Open Access*: “refers to free, unrestricted online access to research outputs such as journal articles and books. Open Access content is open to all, with no access fees”⁴.
- *Open Science*: “efforts to make the output of publicly funded research more widely accessible in digital format to the scientific community, the business sector or society more generally”⁵.

⁴ <https://www.nature.com/openresearch/about-open-access/what-is-open-access/>

⁵ OECD (2015) “Making Open Science a Reality”. OECD Science, Technology and Industry Policy Papers, No. 25, OECD Publishing, Paris. <http://dx.doi.org/10.1787/5jrs2f963zs1-en>

iii. Open Access /Open Science Policy

As noted above, the OECD describes Open Science as “efforts to make the output of publicly funded research more widely accessible in digital format to the scientific community, the business sector or society more generally”⁶. It has the potential to make research more responsive to societal challenges, more inclusive and more accessible to new users. Carlos Moedas, EU Commissioner for Research, Science and Innovation, made Open Science one of his priorities in the 2016 report “*Open Innovation, Open Science, Open to the World: A Vision for Europe*”⁷.

The 2016 Dutch EU Presidency conference was a significant step in articulating an agreed Open Science agenda for Europe. Its proceedings culminated in the Amsterdam Call for Action on Open Science⁸ in which 12 actions are advocated under the following five themes:

- i. Removing barriers to Open Science;
- ii. Developing research infrastructures;
- iii. Fostering and creating incentives for Open Science;
- iv. Mainstreaming and further promoting Open Science policies;
- v. Stimulating and embedding Open Science in science and society.

In May 2016, the European Council agreed that immediate access to publicly funded scholarly publications should be the default by 2020⁹. This policy was reflected and reinforced by the European Commission Recommendation of 25 April 2018 on access to and preservation of scientific information¹⁰, which asks Member States to:

⁶ OECD (2015) “Making Open Science a Reality”. OECD Science, Technology and Industry Policy Papers, No. 25, OECD Publishing, Paris. <http://dx.doi.org/10.1787/5jrs2f963zs1-en>

⁷ European Commission (2016) *Open innovation, open science, open to the world*. Available at: <https://publications.europa.eu/en/publication-detail/-/publication/3213b335-1cbc-11e6-ba9a-01aa75ed71a1>

⁸ Netherlands EU Presidency (2016) *Amsterdam Call for Action on Open Science* Available at: <https://www.government.nl/binaries/government/documents/reports/2016/04/04/amsterdam-call-for-action-on-open-science/amsterdam-call-for-action-on-open-science.pdf>

⁹ Europa (2016) *The transition towards an open science system* (Proceedings of the Council of the European Union No. 9526/16). Brussels. Available at: <https://data.consilium.europa.eu/doc/document/ST-9526-2016-INIT/en/pdf>

¹⁰ European Commission (2018). Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32018H0790&from=EN>

“set and implement clear policies (as detailed in national action plans) for the dissemination of and open access to scientific publications resulting from publicly funded research.”

This Recommendation covers issues associated with Open Access to Publications; Management of Research Data; Preservation and re-use of scientific information; Infrastructures for Open Research; Skills and Competencies; and Incentives and Rewards. In April 2018, the European Commission also adopted a proposal for a revision of the Public Service Initiative (PSI) Directive, which requires national policies to facilitate re-use of research data resulting from publicly funded research. All projects receiving Horizon 2020 funding are required to make sure that any peer-reviewed journal article they publish is openly accessible, free of charge. Horizon Europe will also make the “*principle of open science its modus operandi, requiring open access to publications and data*”¹¹.

In September 2018, Plan S¹² was launched by Science Europe and a coalition of research funders across Europe – including Science Foundation Ireland – to rapidly advance this agenda. It is supported by the European Commission and the European Research Council and aims to achieve full and immediate Open Access to publications from publicly funded research from 2020 onwards, as well as calling for a major shift in current academic publishing models towards a system that is more accessible, efficient, fair, and transparent. It supports the principles of the San Francisco Declaration on Research Assessment (DORA)¹³, which indicate that research should be assessed on its own merits, rather than on the basis of the journal/venue in which the research is published. The key principles underpinning Plan S are:

- Authors should retain copyright on their publications, which must be published under an open licence such as Creative Commons;
- The members of the coalition should establish robust criteria and requirements for compliant open access journals and platforms;

¹¹ European Commission (2018) Press Release: *EU Budget. European Commission proposes most ambitious Research and Innovation Programme yet*. Available at: http://europa.eu/rapid/press-release_IP-18-4041_en.htm

¹² <https://www.coalition-s.org/>

¹³ <https://sfdora.org/read/>

- They should also provide incentives for the creation of compliant open access journals and platforms if they do not yet exist;
- Publication fees should be covered by the funders or universities, not individual researchers;
- Such publication fees should be standardised and capped;
- Universities, research organisations, and libraries should align their policies and strategies.

In Ireland, the National Open Research Forum¹⁴, co-chaired by the HEA and Health Research Board (HRB), with secretariat from DBEI, has been working with key stakeholders to develop a *National Framework on the Transition to an Open Research Environment*¹⁵, as the first step in a process to create a National Action Plan for the transition to an open research environment in Ireland. The principles in the ‘Framework’ build upon and replace existing national and international open research policies, and, through a planning process to 2020, will move to alignment with developing European Commission policy¹⁶ and the principles of ‘Plan S’ where appropriate¹⁷. The *Innovation 2020*¹⁸ Implementation Group has been invited to endorse the Framework in May 2019.

iv. International developments in academic publishing and procurement

Since the 1990s, leading publishers have packaged large bundles of journals for universities, libraries and other research organisations, at a discount from the aggregate list price per journal, through a subscription model¹⁹. In some countries, these deals are negotiated centrally by consortia of universities (often including national libraries and to a lesser extent other beneficiaries) at a national or regional level. Stakeholder needs are generally identified by consortia in advance of commencing negotiations. By bundling journals, a wide variety of

¹⁴ <http://norf-ireland.net/>

¹⁵ NORF (2019) *National Framework on the Transition to an Open Research Environment* available at: <http://norf-ireland.net/>

¹⁶ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0790&from=EN>

¹⁷ COAlitionS (2018) Plan S. Available at: https://www.scienceurope.org/wp-content/uploads/2018/09/Plan_S.pdf

¹⁸ *Innovation 2020* is Ireland’s strategy for research and development, science and technology.

¹⁹ See <http://www.pnas.org/content/111/26/9425.full> for history of how this came about.

smaller journals in specialised areas can survive, while publishers benefit through a guaranteed revenue stream at a high overall value per deal. The perceived benefit for the institutions has been access to a large volume of journal titles, at a lower per-title price than purchasing individual titles at list price would secure. However, escalating bundle costs have placed additional pressure on library budgets, and raised questions about the value for money of these 'Big Deals'²⁰.

A survey by the European Universities Association (2016/17)²¹ with participants from 28 National Rectors' Conferences across Europe revealed that approximately €384 million per annum was paid under Big Deals for periodicals. This is a conservative estimate, as respondents were asked to only include the three largest Big Deals for periodicals²². Additionally, of the 82 subscription contracts examined, circa 50%, included an increase of between 0-4% for each year covered by the contract (over half of contracts spanned 3 years). Almost 16% of contracts included annual price increases of between 4-6%, while respondents did not disclose price increases for about 27% of the reported contracts. This is creating an unsustainable position for universities and libraries in terms of affordability, while major publishers continue to benefit from substantial profit margins (up to 30%)²³.

Open Access is another key driver underpinning the call for new publishing models and deals at an international level. Germany and Sweden have been at the forefront of the action since 2016 and their access to journals was recently cut off by the publisher Elsevier²⁴. Germany's negotiations have centred around reducing subscription prices and promoting immediate open access to publications. Finland and the Netherlands have also adopted a confrontational position with journal publishers. Ireland has negotiated robustly with Elsevier, achieving a

²⁰ SPARC Big Deal Cancellation Tracking: <https://sparcopen.org/our-work/big-deal-cancellation-tracking/>

²¹ EUA (2018) *Big Deals Survey Report*. Available at: <http://www.eua.be/Libraries/publications-homepage-list/eua-big-deals-survey-report---the-first-mapping-of-major-scientific-publishing-contracts-in-europe.pdf>

²² EUA (2018) *Big Deals Survey Report*, p. 11 - 23 countries provided data about their periodicals Big Deal expenditure. Information about costs was provided for 66 out of the total of 82 Big Deal periodicals contracts reported. The survey found a great disparity in national expenditure on Big Deals between countries, varying from total costs of €1.4 million to €97.5 million per annum.

²³ EUA (2018) *Big Deals Survey Report*, p. 2.

²⁴ Kwon, D. (2018, July 19). Universities in Germany and Sweden Lose Access to Elsevier Journals. *The Scientist*. Retrieved from <https://www.the-scientist.com/news-opinion/universities-in-germany-and-sweden-lose-access-to-elsevier-journals--64522>

favourable deal for 2019. Open access repositories have been developed to improve affordability and access to research over a traditional subscription-based model. In line with the growth of open access policies at a European and National level, as outlined in Section 5.3, an analysis published in 2018 found that 28% of literature is now freely available in some form, including in university repositories, and the growth rate of open access articles is much higher than that of articles behind paywalls²⁵. Academics are increasingly employing ‘work arounds’, such as inter-library loans, to access content they require that is not available by subscription or through open access.

The scholarly communication environment is complex and rapidly shifting. The emergence of Plan S – the implications of which are still being teased out – has caused concern to members of the academic and research community, most notably early career researchers and those from the Arts, Humanities and Social Sciences, whose publishing practices differ to STEM researchers. Concern has also been expressed for the role of Learned Societies and other small publishers serving niche fields.

As noted in the BH Associates report:

“The complexities surrounding journal subscriptions and e-resources, and Open Access, have transformed consideration of, and negotiation around, these issues from a university library matter to one affecting whole institutions, as well as the entire higher education and research system with wider national implications. As we move to an Open Access environment, access becomes an institutional and national issue”.

²⁵ Matthias, L., Norlander, B., West, J., Larivière, V., Priem, J., Haustein, S., ... Piwowar, H. (2018). The state of OA: a large-scale analysis of the prevalence and impact of Open Access articles. *PeerJ - Peer-Reviewed & Open Access*, 6, e4375. <https://doi.org/10.7717/peerj.4375>