

Open Access Plan of the Research Grants Council

1. Preamble

1.1 Free and open access to outputs arising from publicly-funded research offers multiple benefits to the research community, the business sector, and the general society, by significantly accelerating knowledge sharing and transfer.

1.2 In the international arena, support for the open access movement is noticeable among research funding agencies and international organisations. National funders have set out guidelines and requirements for supported researchers on opening up research outputs.

1.3 As a follow up to the recommendation by the Review Report of the Working Group on the Review of the Research Grants Council (RGC) (Phase II) promulgated in October 2018, the RGC has been revisiting its existing open access policy and exploring the opening up of both the publications and data arising from its funded research projects, with reference to international best practices. Fully recognising that fostering a knowledge sharing culture across sectors of the community is a gradual process, the RGC will proceed at a sensible pace and in full consultation with the academic community.

1.4 The RGC Open Access Review (the Review) was kicked off in 2020. Two rounds of consultation with the University Grants Committee (UGC)-funded universities (the universities), seeking views on the preliminary directions for the Review and the proposed initiatives for open access respectively, have since been completed.

1.5 Having noted the universities' feedback received in the two rounds of consultation, the Research Group, UGC endorsed the Open Access Plan (the Plan) and its implementation timetable at the meeting held on 6 January 2021. The Plan contains a list of initiatives to be undertaken within and beyond the research community under a phased approach for promotion of open access. The initiatives will be implemented progressively and reviewed regularly in the span of five and a half years.

2. Guiding Principles

2.1 Through the two rounds of consultation, the RGC and the research community as a whole identified the rationales and sentiments for open access to research outputs and took stock of the status quo comprehensively. The views collected could be summarised in the following guiding principles which form the basis of the Plan:

- (a) *Support for open access:* There is general consensus to support open access for peer-reviewed journal articles arising from RGC-funded projects and it is a majority view that publication-generating data of certain funding schemes/ disciplines could be open for public access and reuse;
- (b) *Maximum flexibility:* While setting and monitoring percentage targets for open access are crucial, maximum flexibility should be given to academics to choose their open access routes;
- (c) *Gradual implementation:* The implementation must be gradual, taking into account the need for setting up/ enhancing existing infrastructure and/ or industry practices, raising awareness on data management and most importantly, creating an open access culture among researchers;
- (d) *Financial support:* Financial support is required for meeting the needs set out in (c), while a balance must be struck between ensuring value for money and public interest; and
- (e) *Regular reviews:* Timely and regular reviews on implementation are important for the open access policies to keep abreast with developments in the research sector locally and worldwide.

2.2 Since open access is a mindset-shifting process that involves the participation of stakeholders including researchers, university administrators, the RGC and the public, it should be implemented at a measured pace and with concerted efforts. Following the guiding principles set out above, a two-phased Plan, focusing on laying the foundation through the initiatives of Phase I, setting out the vision for Phase II and some longer term directions for further deliberation at the end of Phase II, is proposed at **Appendix A**.

3. Phase I: Laying the Foundation

3.1 Phase I (from February 2021 to January 2024) of the Plan focuses on building the infrastructure and culture for open access, foundation for transforming the mindset and the practices on open access in the research community. This responds to the views that the sector lacks the necessary requirements to support open access, such as setting up database and reporting mechanism on open-access-related information and awareness building on data sharing among researchers.

3.2 Initiatives under Phase I of the Plan include the following:

- (1) Promulgation of the Plan;
- (2) Statistics Collection;
- (3) Statistical Analysis;
- (4) Gateway Construction;
- (5) Sectoral Training; and
- (6) Local and International Publicity and Promotion.

The implementation timeline of initiatives in Phase I is set out at **Appendix B**.

Initiative 1: Promulgation of the Plan

3.3 The implementation of the Plan will last for over five years involving a large number of stakeholders including researchers, university administrators, the RGC and the public. To sustain the momentum of the implementation, the Plan will be published on the RGC's website and Research Offices will be notified by letters in February.

Initiative 2: Statistics Collection

3.4 For setting progressive targets for journal articles arising from RGC-funded projects to provide open access and formulating the funding models for Article Processing Charges (APCs), the RGC would need to know the status quo and have accurate estimation on the prevalence of open access among peer-reviewed journal publications arising from RGC grants and the expense on APCs. For these purposes, the RGC shall set clear parameters for the universities and funded researchers to collect and report on open-access-related information.

3.5 Currently, the UGC and the RGC collect information on research outputs of the universities on two occasions. *University-level statistics* on research outputs produced within the previous academic year, irrespective of the source of funding, are collected from the universities in October every year through the annual Common Data Collection Format (CDCF) exercise. At the same time, principal investigators (PIs) of RGC-funded research projects are required to provide information of peer-reviewed publications arising directly from the projects in the progress reports and completion reports. Such *article-level information* includes:

- (a) details of the author(s);
- (b) year of publication;
- (c) title and journal/ book (with the volume, pages and other necessary publishing details specified);
- (d) whether the paper has acknowledged the support of the RGC;
- (e) whether the paper is accessible from the institutional repository;
- (f) year of acceptance (for paper accepted but not yet published);
- (g) whether there is any paper under review; and
- (h) whether there is any paper under preparation.

3.6 As a starting point for promoting open access, it is essential for the RGC and the universities to have a comprehensive view of the open access landscape in the local research community. To do so, additional classes of university-level statistics and article-level metadata information of peer-reviewed journal articles arising from RGC-funded research projects are to be collected through the annual CDCF exercise and the enhanced completion report forms.

3.7 Subject to further consultation with the universities, the additional categories of statistics to be collected would have been confirmed by mid-2021. RGC's endorsement on amending the reporting requirements in the CDCF and the completion report forms would be sought in June 2021.

Initiative 3: Statistical Analysis

3.8 With the amendments of the current reporting mechanisms (i.e. the CDCF and the completion report forms) as suggested above, the RGC will be provided with additional university-level statistics and article-level metadata information, which will inform the RGC on the general landscape of open access across the sector as well as the characteristics of research outputs from individual disciplines and funding schemes.

3.9 With such information, the RGC will conduct analysis on the following issues after the first year of the enriched statistics collection (i.e. July 2021 to June 2022) as well as the second year (i.e. July 2022 to June 2023):

- (a) the proportion of journal articles arising from RGC-funded projects with open access (with breakdown by routes, universities and disciplines);
- (b) the amount of APCs paid by the universities to the publishers for open access journals; and
- (c) the embargo periods, imposed by publishers, by disciplines.

The objective of Initiatives 2 and 3 is to provide a factual basis for consideration of the progressive targets on open access as well as the related funding support model at the end of Phase I of the Plan, instead of for assessing the performance of the universities in terms of open access. As the CDCF statistics of the immediately past academic year are usually provided to the UGC Secretariat in October every year, the two rounds of analysis will be completed by the end of 2022 and 2023 respectively. At the second round of statistical analysis, the RGC should have ample information on hand to discuss further with the universities on setting the progressive targets as well as the financial support model.

Initiative 4: Gateway Construction

3.10 To enable quick and easy search of and access to information on peer-reviewed journal articles arising from RGC-funded research projects by the general public, the RGC will set up an RGC Publication Gateway (the Gateway), listing metadata information of journal articles arising from RGC-funded projects, including the open access links to the articles, and if they are not with open access, other affordable means to gain access to the articles.

Content

3.11 It is noted in the consultation that all of the universities have made the metadata of their research outputs available to the public. Given this positive response as well as the enriched article-level metadata information collection (as suggested in Initiative 2), the Gateway, as a one-stop online central database, will list some selected metadata information of peer-reviewed journal articles arising from RGC-funded research projects, e.g. RGC project number and title, information

of the PI and the corresponding author, title, abstract, open access status and other identifiers, as well as the affordable means of gaining access to them. The proposed list of information to be provided on the Gateway is at **Appendix C**. Sensitive information such as APCs and copyright licences will not be shown on the Gateway.

Timeline

3.12 When the completion report forms are amended to collect the additional article-level metadata information, some of the information provided will be uploaded to the Gateway as public information. In other words, the researchers/ Research Offices will not need to input the information again for the Gateway, to reduce the administrative work required.

3.13 Apart from the new journal articles to be published after the promulgation of the Plan, the UGC Secretariat will also by phase upload the metadata information of the past journal articles of the RGC-funded projects as far as practicable, collected from past completion reports and in the institutional repositories of the universities as well as other online databases. The UGC Secretariat will make reference to and extract the relevant information from the past completion reports, and request the Research Offices' assistance in confirming the open access status of relevant outputs as well as other information. Since cross-checking of the past publication information will take time and manual efforts, a working period of one year would be given to the universities for cross-checking the first batch (publication information of the past ten years) before the uploading. The UGC Secretariat will provide the universities with the information extracted from past completion reports by June 2021. The first batch of past publication information will be uploaded by June 2022.

3.14 The success of the Gateway hinges on the accuracy of the information it provides. Its official nature, given the fact that it is constructed and launched by the UGC Secretariat in collaboration with the universities, will lead to a high public expectation on the Gateway's reliability. The cross-checking is therefore a crucial step for this initiative.

3.15 With the support of the universities and researchers, the Gateway is expected to be launched in February 2022 with the first batch of metadata information of newly published articles uploaded and the continued uploading of the metadata information of both new and past published articles.

Initiative 5: Sectoral Training

3.16 The universities opine in the consultation that the awareness of data management and sharing is in general low among local academics. This may be due to a lack of training on the subject along their career path. While the universities may have guidelines, education and training programmes on data management arranged occasionally with the resources at hand, the majority of researchers have not been provided with the opportunities to receive training on the necessary skills or knowledge for the management or opening up of data generated by their projects.

3.17 To prepare researchers for inclusion of data access issues in their consideration before, during, and after the completion of their research projects, the universities should receive support in enhancing researchers' readiness and literacy in data management. Sector-wide capacity building initiatives, such as cross-university seminars and trainings on data management, will be rolled out regularly throughout Phase I.

3.18 Experts in data management will be engaged from outside the UGC sector to deliver the training programmes in both physical mode and online mode. Topics may include:

- (a) the benefits and importance of preserving and sharing data;
- (b) the diversity of data in various disciplinary settings and their management needs throughout the entire research data lifecycle;
- (c) best practices for data organisation, documentation, citation, licensing, transformation, storage and security;
- (d) assessment of the trustworthiness of repositories;
- (e) legal and ethical requirements for managing data about human subjects; and
- (f) Data Management Plan (DMP) creation and components of good DMPs.

3.19 Taking into account the disciplinary differences in the types of research data collected and thus the best practices in managing them, the content of the training programmes will be suitably adjusted to accommodate the needs of investigators in diverse academic fields. Some university libraries have been providing the relevant training to faculty members and researchers. The UGC Secretariat will work out modules for the training and seek advice and assistance from the universities with relevant expertise as well as other experts in providing the sectoral training.

3.20 While seminars/ workshops are to be conducted face-to-face quarterly at the universities on a rotation basis throughout Phase I where feasible to facilitate direct exchange of ideas and experience, online learning materials will be developed and made available to all researchers at the universities so that everyone will have the opportunity to be trained and refresh what has been learned at any time.

3.21 Through a series of training programmes, it is expected that investigators would get to understand the benefits of proper data management to themselves and others, get hold of the essential knowledge and skills that support the long-term preservation, access, and reuse of data, and more importantly, get prepared for the submission of DMPs in the next phase.

Initiative 6: Local and International Publicity and Promotion

3.22 The efforts on open access should not stop at the university level. Rather it is equally important for the public to understand the wider benefits of open access to the community and how to gain access to the research findings. As such, a promotional campaign would be mounted in May 2022 to promote to the public the Gateway as well as the sector's effort in promoting open access. To further enhance the impact of the RGC's research outputs, it is also planned that a round of international promotional activities on the Gateway as well as the RGC's open access policy through social media/ advertising in international research-related magazines/ journals would be held in February 2023.

4. Phase II: Target Enforcement and Monitoring

4.1 Progressing to Phase II (from February 2024 to October 2026), with the preparatory work carried out in Phase I, the main theme would be target enforcement and monitoring. Subject to a review on the effectiveness of Phase I initiatives as well as further consultation with the universities, progressive percentage targets for peer-reviewed journal articles arising from RGC-funded projects to be publicly available would be set, with funding support on open access provided for the universities in parallel. As far as data management is concerned, DMPs would be a mandatory requirement for applications for the RGC's research funding schemes. Subject to the readiness of the research sector, the RGC would also consider launching a pilot scheme for data sharing at the end of this Phase.

Initiative 7: Setting the Progressive Target

University-based Target

4.2 Taking into account the time needed for the research community to adjust to the new open access policy and discipline-specific characteristics of open access to research publications, the RGC would set less ambitious, mid-range university-based progressive percentage targets for open access to peer-reviewed journal articles arising from its funded projects through routes chosen by authors themselves at the end of phase I, in consultation with the individual universities. The mid-range percentage would also be more advantageous to the universities for coming into more favourable agreements with publishers of open access journals and “transformative agreements” which encompass APCs and subscription of journals with sizeable publishers.

Sector-wide Target

4.3 While the progressive targets are to be set with the individual universities, a sector-wide percentage would be set as the target for the end of Phase II, making reference to the findings of the statistical analysis and further consultation with the universities at the end of Phase I.

Funding Support

4.4 With a view to supporting the universities in meeting the percentage targets, annual funding support for open access, in particular APC expenses, could

be provided, subject to the information to be collected in Phase I. To achieve the best value of money, the universities would be allowed to deploy the annual funding for open-access-related initiatives apart from APCs such as entering into transformative agreements with publishers or upgrading their institutional repositories.

4.5 To enable the RGC to further review its initiatives for open access beyond Phase II, the universities in receipt of funding support for open access would be invited to report how the funding has been spent over the previous academic year, such as allocations by open-access-related initiatives, APC expenses by academic disciplines, in the regular CDCF exercise.

Non-compliance

4.6 It is recognised that there are a range of rationales for non-compliance such as privacy concerns, fiscal constraints, and embargos by publishers. Hence, in line with the guiding principles of the Plan, the RGC would allow some flexibility in compliance with the percentage targets and not suggest any implications for non-compliance for Phase II. Subject to further review and consultation with the universities, the RGC would consider measures in connection with non-compliance beyond Phase II.

Initiative 8: DMP as a Requirement for Applications

4.7 The requirement of DMP in the applications submitted to the RGC's research funding schemes, which is a recommendation from the RGC Review (Phase II), is an important step to promote responsible data management and sharing. Thus, following the training on DMP provided during Phase I, the sector should be ready for DMPs to become a requirement for applications from Phase II onwards. To streamline the preparation and submission processes, the RGC would consider providing a DMP template, which would form part of the grant application and be submitted to the RGC alongside the research proposal.

4.8 Besides submission, PIs would be required to report on the implementation of the DMP. The RGC would study and consult the universities further at the end of Phase I on how researchers would provide updates to the DMPs submitted.

Initiative 9: Data Sharing Pilot Scheme

4.9 Subject to the implementation of initiatives in Phases I and II and further consultation with the universities, the RGC could at the end of Phase II further consider the implementation of a data sharing pilot scheme for publication-generating data from funding scheme(s) (such as the Theme-based Research Scheme)/ discipline(s) (public-policy-related subjects) most relevant to the development of Hong Kong and therefore having the highest public value.

5. Beyond Phase II: Building on Success

5.1 Subject to a review of the progress of the implementation in Phase II as well as the developments in the research sector, the following enhanced initiatives could be considered beyond Phase II in consultation with the universities:

- (a) further increasing the percentage target for peer-reviewed journal articles arising from RGC-funded research projects that provide open access;
- (b) including more funding schemes/ disciplines in the data sharing pilot scheme to open up publication-generating data; and
- (c) building a centralised database for data sharing which could meet long-term and large-scale needs.

Timeline for Implementation and Consultation

Timeline	RGC and UGC-funded Universities	Publicity and Education Initiatives
Phase I (February 2021 – October 2023)	Collection of open-access-related statistics	Promulgation of the Open Access Plan
	Analysis of open-access-related statistics	RGC Publication Gateway construction
		Sectoral training on data management
		Local and international promotion
November 2023 – January 2024	Review of Phase I initiatives Consultation on Phase II initiatives	
Phase II ¹ (February 2024 – July 2026)	Setting and enforcing university-based and sector-wide targets	/
	Requirement of Data Management Plan for applications	
	Data sharing pilot scheme	
August 2026 – October 2026	Review of Phase II initiatives Consultation on initiatives beyond Phase II	
Beyond Phase II ²	Further increasing percentage target	/
	Expanding data sharing pilot scheme	
	Building a centralised database for data sharing	

¹ Implementation of Phase II initiatives is subject to the outcomes of a review of Phase I initiatives and further consultation with the universities.

² Implementation of the initiatives beyond Phase II is subject to the outcomes of a review of Phase II initiatives and further consultation with the universities.

Phase I Implementation Timeline

Timeline	Actions
February 2021	<ul style="list-style-type: none"> ● Promulgation of Open Access Plan (the Plan) ● Consultation with universities on additional statistics to be collected ● Drawing up a timetable with universities on briefing on the Plan
March – May 2021	<ul style="list-style-type: none"> ● Confirming the additional statistics to be collected ● Engagement of a service provider for RGC Publication Gateway construction ● Engagement of a service provider for sectoral training on data management ● Briefing on the Plan
June – August 2021	<ul style="list-style-type: none"> ● Seeking RGC’s endorsement on amending reporting requirements in Common Data Collection Format (CDCF) and completion report forms ● Collecting additional article-level metadata information of new journal articles through completion reports ● Providing past publication information to universities for cross-checking and supplementing ● Regular consultation with universities on reporting requirements in CDCF ● Technical development of RGC Publication Gateway ● Drawing up rosters with universities on data management seminars/ workshops ● Developing training materials on data management
September 2021	<ul style="list-style-type: none"> ● Launching online training materials on data management
October – November 2021	<ul style="list-style-type: none"> ● Uploading first batch of metadata information of journal articles onto RGC Publication Gateway ● First data management seminar/ workshop
December 2021 – January 2022	<ul style="list-style-type: none"> ● Testing of RGC Publication Gateway

February 2022	<ul style="list-style-type: none"> ● Launch of RGC Publication Gateway
March 2022	<ul style="list-style-type: none"> ● Second data management seminar/ workshop
May 2022	<ul style="list-style-type: none"> ● Third data management seminar/ workshop ● Local promotional campaign on open access and RGC Publication Gateway
June 2022	<ul style="list-style-type: none"> ● Uploading first batch of past publication information from universities after cross-checking and supplementing
September 2022	<ul style="list-style-type: none"> ● Fourth data management seminar/ workshop
October 2022	<ul style="list-style-type: none"> ● Collection of university-level statistics for 2021/22 through CDCF
November – December 2022	<ul style="list-style-type: none"> ● Fifth data management seminar/ workshop ● Analysis of first-year statistics (2021/22)
February 2023	<ul style="list-style-type: none"> ● Sixth data management seminar/ workshop ● International promotional activities on RGC Publication Gateway
May 2023	<ul style="list-style-type: none"> ● Seventh data management seminar/ workshop
September 2023	<ul style="list-style-type: none"> ● Eighth data management seminar/ workshop
October 2023	<ul style="list-style-type: none"> ● Collection of university-level statistics for 2022/23 through CDCF
November 2023 – January 2024	<ul style="list-style-type: none"> ● Analysis of second-year statistics (2022/23) ● Reviewing effectiveness of Phase I initiatives ● Consultation with universities on Phase II initiatives ● Firming up Phase II initiatives

**Proposed Information to be Provided on
the RGC Publication Gateway**

- (a) RGC project number, title and funding scheme
- (b) Contact information and ORCID of the principal investigator
- (c) Contact information and ORCID of the corresponding author(s)
- (d) Title and year of publication
- (e) Name and publisher (or equivalent) of the journal (with volume, pages and other necessary publishing details)
- (f) Digital object identifier
- (g) Abstract (as set out in the journal article)
- (h) Open access status
- (i) If not for immediate open access, the embargo period (if any)
- (j) Other affordable means for access (if any)
- (k) Description of the copyright vested with the author(s)
- (l) Hyperlink to the publication (the link to institutional repository if preferred)
- (m) Information of the patents associated with the article (if any)