

**COMMENTS ON THE  
PROPOSED OPEN ACCESS POLICY OF THE DEPARTMENT OF BIOTECHNOLOGY AND  
DEPARTMENT OF SCIENCE**

*by*

**THE CENTRE FOR INTERNET AND SOCIETY, INDIA**

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## **I. PRELIMINARY**

1. This submission presents preliminary clause-by-clause comments by the Centre for Internet and Society (“CIS”) on the Proposed Open Access Policy (“**the Policy**”) of the Department of Biotechnology (“DBT”) and Department of Science (“DST”).
2. This submission is based on the draft document for an open access policy by the DBT/DST. The draft document may be accessed on the website of the DBT.<sup>1</sup>
3. CIS commends the Ministry of Science and Technology, Government of India for its efforts at seeking inputs from various stakeholders prior to the release of its open access policy. CIS is thankful for the opportunity to have been a part of the discussion during the framing of the Policy; and to provide this clause-by-clause submission, in furtherance of the feedback process continuing from the aforesaid draft Policy.

## **II. OVERVIEW**

4. The Centre for Internet and Society is a non-governmental organization engaged in research and policy work in the areas of, inter alia, access to knowledge and openness.<sup>2</sup> This clause-by-clause submission is consistent with CIS’ commitment to safeguarding general public interest, and the interests and rights of various stakeholders involved. Accordingly, the comments in this submission aim to further these principles and are limited to those clauses that most directly have an impact on them.

## **III. CLAUSE-BY-CLAUSE COMMENTS AND ANALYSIS**

5. **“An important function of DBT/DST is to support basic, translational and applied scientific research through the creation of suitable infrastructure, by providing funding to individual scientists, institutions and start-ups, and through any other means deemed necessary.”**

5.1. CIS has observed the superior standard of scientific research and development performed at DST/DBT<sup>3</sup>, and the steps taken to create high quality infrastructure by providing direct and indirect funding to several individual scientists, institutions and start-ups.

5.2. CIS strongly supports DBT/DST’s endeavour to extend the benefits of scientific research to the public produced by the persons in the foregoing comment by creating an open access policy.

<sup>1</sup> See “DBT-DST Open Access Policy” available at <[http://dbtindia.nic.in/docs/DBT-DST\\_Open\\_Access\\_Policy.pdf](http://dbtindia.nic.in/docs/DBT-DST_Open_Access_Policy.pdf)> (last accessed August 11, 2014).

<sup>2</sup> See [www.cis-india.org](http://www.cis-india.org) (last accessed August 11, 2014) for details about CIS’ work.

<sup>3</sup> See “Annual Report 2012-13”, Ministry of Science and Technology, available at [http://www.dst.gov.in/about\\_us/ar12-13/annual-report-2012-13.pdf](http://www.dst.gov.in/about_us/ar12-13/annual-report-2012-13.pdf) (last accessed August 11, 2014).

5.3. CIS believes that the creation of an open access policy will advance the “creation of suitable infrastructure” by DBT/DST. Further, academic literature argues that open access works have a greater impact than works that are not freely available<sup>4</sup> and the public ought to benefit from research funded by the taxpayers’ money.<sup>5</sup>

**6. “Since all funds disbursed by DBT/DST are public funds, it is important that the information and knowledge generated through the use of these funds are made publicly available as soon as possible.”**

6.1. The Policy proposes usage of the phrase “made publicly available.”

6.2. It is submitted that the phrase “made publicly available” does not sufficiently convey or establish the specific rights of the public with regard to the use of the information and knowledge generated at DBT/DST.

6.3. Under Indian Copyright law<sup>6</sup>, the Government is the first owner of research “made or published under the control or direction” of any of its department or public undertaking in the absence of a contract to the contrary. Therefore, the Government is the owner of the knowledge and information generated at DBT/DST.<sup>7</sup> The author by virtue of section 57 of the Indian Copyright Act, 1957, however, retains the following rights in the publication:

- a. Identification right or attribution right;
- b. Right to maintain integrity in the work; and
- c. Right to prevent destruction of the work.

These rights are collectively known as the author’s moral rights. They remain with the author even after assignment of the copyright or first ownership vesting with the Government. Whereas, the Policy permits unfettered access to research, there are limitations on further use of the work placed on third parties by virtue of the aforementioned rights.

6.4. CIS, therefore, in support of maintaining precision of the Policy recommends use of the phrase “made publicly available as soon as possible, subject to limitations prescribed under Indian law.”

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<sup>4</sup> See ‘Do Open access articles have a greater research impact?’, Kristine Antelman available at <[http://eprints.rclis.org/5463/1/do\\_open\\_access\\_CRL.pdf](http://eprints.rclis.org/5463/1/do_open_access_CRL.pdf)> (last accessed August 5, 2014).

<sup>5</sup> See “Academic knowledge, Open access and Democracy”, available at <http://www.arcadiahfund.org.uk/media/5454/open-access.pdf> (last accessed August 11, 2014)

<sup>6</sup> Copyright Act, 1957.

<sup>7</sup> Section 2(k) of the Copyright Act, 1957 read with Section 17 of the Copyright Act, 1957.

6.5. CIS strongly supports the Policy’s rationale to make all knowledge openly accessible because it is produced by public funding. The rationale also aligns with academic literature advocating that the public ought to benefit from research funded by the taxpayers’ money.<sup>8</sup>

**7. “Research funded by DBT/DST results in new ideas and knowledge. However, DBT/DST will not underwrite article processing charges levied by some journals.”**

7.1. CIS observes that while a majority of open access publications may not charge subscription or other access fees, they usually cover their operating expenses through other sources by levying processing fees paid by or on behalf of authors for submission to or publication in the journal.<sup>9</sup>

7.2. CIS believes that the Policy should not cause detriment to persons performing research under DBT/DST, safeguard each person’s interest and career advancement. DBT/DST must create suitable infrastructure to accommodate prevalent practices and ensure the best support for its researchers.

7.3. CIS, therefore, suggests the need to establish a durable mechanism for underwriting reasonable publication charges for articles written by its faculty and published in fee-based open-access journals and for which other institutions would not be expected to provide funds.<sup>10</sup>

7.4. The following methods may be elected to further the aforementioned comment:

- a. DST/DBT may insert a provision to factor Article Processing Charges into the researcher’s grant; or
- b. DST/DBT may establish an OA Publishing Fund. Funding may emerge from potential sources such as the institutional research division responsible with tracking and managing grant funding.
- c. DST/DBT may purchase an institutional membership with OA publishers. Several major OA publishers discount their processing charges if an author is affiliated with an institution that has a membership.<sup>11</sup>

**8. “The DBT/DST affirms the principle that the intrinsic merit of the work, and not the title of the journal in which an author’s work is published, should be considered in making future funding decisions. DBT/DST does not recommend the use of journal impact factors, as a surrogate measure of the quality of individual research articles, to assess an individual scientist’s contributions, or in hiring, promotion, or funding decisions.”**

8.1. CIS strongly believes that the policy successfully creates a level playing field for

<sup>8</sup> See “Academic knowledge, Open access and Democracy”, available at <http://www.arcadiafund.org.uk/media/5454/open-access.pdf> (last accessed August 11, 2014)

<sup>9</sup> See “Compact for Open access publishing Equity”, available at <http://www.oacompact.org/compact/> (last accessed August 10, 2014)

<sup>10</sup> *ibid.*

<sup>11</sup> See “Funding open access journal publishing”, Christine Fruin, Fred Rascoe, available at <http://crln.acrl.org/content/75/5/240> (last accessed August 10, 2014)

assessment of quality of publications by making the title of the journal irrelevant.

8.2. CIS observes that the particular clause uses “title of the journal” to imply that the title is irrelevant as a factor to judge the merit of the work; whereas in the following sentence uses “DBT/DST does not recommend the use of journal impact factors” as a factor to assess quality of the work. The synonymous use creates an impression that “journal impact factor” is similar to “title of the journal”, which is a specious representation.

8.3. CIS submits that “journal impact factor” is a measure reflecting the average number of citations to recent articles published in the journal, and is only one of the many methods of calculating quality of a publication.<sup>12</sup>

8.4. CIS suggests that the clause may be amended as follows, insofar as the preceding comments are concerned:

“The DBT/DST affirms the principle that the intrinsic merit of the work, and not the title of the journal in which an author’s work is published, should be considered in making future funding decisions. DBT/DST does not recommend the use of journal impact factors *either*, as a surrogate measure of the quality of individual research articles, to assess an individual scientist’s contributions, or in hiring, promotion, or funding decisions.”

8.5. Further, CIS submits that open access is in a nascent stage in Indian academia, and a person performing research under DBT/DST may lose external benefits by adhering to this clause. In reality, open access journals are yet to cultivate the high quality readership that certain subscription based journals enjoy. The clause prematurely puts a burden on researchers to not publish in subscription based journals enjoying a stellar reputation. Further, mere posting in online repositories will not ensure that the research will be successfully read and critiqued by other members of the academia.

8.6. CIS believes that DBT/DST should provide sufficient infrastructure and freedom to allow researchers to publish by a method of their choice, and not put unnecessary restrictions on the same.

**9. “The DBT/DST believe/s that maximizing the distribution of these publications by providing free online access by depositing them in a gratis open access repository is the most effective way of ensuring that the research it funds can be accessed, read and built upon. This, in turn, will foster a richer research culture.”**

9.1. CIS strongly agrees with DBT/DST’s method of disseminating research. The method is in harmony with the principles of open access since it provides free online access by depositing manuscripts in an open access repository.

9.2. CIS submits that the clause may include depositing full-text, metadata and supplementary materials in addition to the paper, in consonance with Clause 12 of this submission.

**10. “Grantees can make their papers open-access by publishing in an open-access journal or, if they choose to publish in a subscription journal, by posting the final accepted manuscript to an online repository.”**

10.1. The clause indicates that papers may be made open access via two routes, *firstly*,

<sup>12</sup> See “Impact factors: arbiter of excellence?”, Martin Frank, available at <<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC141180/#n102>> (last accessed August 14, 2014)

publishing the paper in an open-access journal, and *secondly*, publishing the paper in a subscription journal. Publishing the paper in a subscription journal entails the grantee to also post the final manuscript to an online repository.

10.2. CIS strongly supports the Policy's direction to grantees to deposit "the final accepted manuscript to an online repository" upon adoption of the second route.

10.3. However, CIS believes that to ensure that ends of open access completely meet; the papers should be *mandatorily* deposited in online repositories which are freely accessible to the public i.e. following the *Green OA* route completely.

10.4. To strengthen foregoing comment, CIS strongly suggests establishment of a *central* online repository under the aegis of DST/DBT. This will guarantee open access to the manuscript in the unfortunate case of the institutional repository failing or delaying in tying up with other institutional repositories and the central repository.

10.4. It is submitted that the clause may be accordingly amended as follows<sup>13</sup>:

"Grantees can make their papers open-access by publishing in an open-access journal and posting the final manuscript to a central online repository, or by publishing in a subscription journal and posting the final accepted manuscript *i.e.* the pre-print version to the central online repository. A preprint is any version of the paper prior to peer-review and publication, usually the version submitted to a journal."

### What should be deposited?

**11. "The final accepted manuscript (after refereeing, revision, etc.) resulting from research projects fully or partially funded by DBT/DST or performed using infrastructure built with the support of DBT/DST and to appear in peer-reviewed professional journals. This also includes review articles, both invited and author initiated, for those who received funding from DBT/DST during that period."**

11.1. It is submitted that the clause fails to declare the applicability of the Policy to non-peer reviewed works, *inter alia*, doctoral dissertations.

11.2. CIS observed that the DBT offers post-graduate programs, including the DBT Postdoctoral Fellowship (DBT- PDF) programme and Post-Graduate programs, *inter alia*.<sup>14</sup>

11.3. CIS supports the extension of the policy to works produced under all programs at DBT/DST (mentioned in the foregoing comment) to increase the efficacy of the Policy and to fulfil greatest dissemination of public funded research.

**12. "The full-text of the paper and metadata should be deposited. Supplementary materials should be made available along with the publication. At the end of the full-text the**

<sup>13</sup> See "Open Access Overview", Peter Suber, available at <<http://legacy.earlham.edu/~peters/fos/overview.htm>> (last accessed August 14, 2014).

<sup>14</sup> See "Human Resource Development: Program", available at <[http://dbtindia.nic.in/uniquepage.asp?id\\_pk=16](http://dbtindia.nic.in/uniquepage.asp?id_pk=16)> (last accessed August 11, 2014).

**acknowledgement should carry the grant number.”**

12.1. CIS strongly supports the deposit of metadata, full-text of the paper to be made available along with other supplementary materials.

12.2. This clause rightly seeks supplementary material to ensure holistic access to the research.

12.3. CIS believes that DST/DBT should ensure that the aforementioned material is deposited in a machine readable format thereby permitting accurate search across the open access infrastructure and supporting interoperability. This will lead to a high degree of openness and foster a more rigorous academic culture.

12.4. In furtherance of the preceding comment, CIS submits that DBT/DST may use Digital Object Identifiers (“DOI”) to create persistent citations of publications available online. DOI ensures interoperability across systems and accurate linking of all material in relation to a publication. OECD has successfully implemented the system in its library system, namely, the OECD iLibrary.<sup>15</sup>

12.4. CIS encourages DBT/DST to develop a more detailed policy on issues affecting the infrastructure required to successfully implement open access at it.

**13. “Papers resulting from funds received from the fiscal year 2012-13 onwards are required to be deposited. Authors are strongly urged to also deposit final accepted manuscripts from funding received in earlier years.”**

13.1. CIS strongly agrees with the scheme of depositing papers.

13.2. It is submitted that this clause will dispel ambiguity for requirement of depositing papers published prior to 2012.

**Where to deposit?**

**14. “The manuscript should be deposited in the grantee’s own institution’s interoperable institutional repository (IR). If the institution does not yet have an IR of its own, then the paper should be deposited in the central repository, which will be created by DBT/DST.”**

14.1. CIS strongly supports depositing papers in the aforementioned repositories.

14.2. It is submitted that the manuscript may be mandatorily be deposited in a central online repository (as suggested in the preceding comments), in addition to the grantee’s own institution’s interoperable institutional repository.<sup>16</sup> This will guarantee open access to the manuscript in the unfortunate case of the institutional repository failing or delaying in tying up with other institutional repositories and the central online repository.

<sup>15</sup> See "We Need Publishing Standards for Datasets and Data Tables", Green T, available at <<http://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.40/2010/wp.8.e.pdf>> (last accessed August 11, 2014).

<sup>16</sup>See “CORE: Three Access Levels to Underpin Open Access”, available at <<http://www.dlib.org/dlib/november12/knoth/11knoth.html>> (last accessed August 11, 2014).

### When to deposit?

**15. “Deposits should be made within one week of acceptance by the journal. However, if the journal insists on an embargo, the material should still be deposited, but the repository will keep the deposited papers non-OA and only make it fully OA at the end of the embargo period. Suggest that the period of embargo not be greater than one year.”**

15.1. CIS strongly supports the time-frame provided for depositing the paper, and the subsequent clause for keeping the paper “dark OA” in the case of an embargo placed on the paper by the publisher.

15.2. CIS suggests that the sentence “Suggest that the period of embargo not be greater than one year” be re-framed to reflect a conclusive position of the DST/DBT.

15.3. CIS submits that the clause may be amended as follows:

“Deposits should be made within one week of acceptance by the journal. However, if the journal insists on an embargo, the material should still be deposited, but the repository will keep the deposited papers non-OA and only make it fully OA at the end of the embargo period. The embargo should operate for a maximum period of one year.”

### Who should deposit?

**16. “This policy applies to individual scientists/institutions who have directly received ad-hoc funding or other support/benefits/infrastructure from DBT/DST as well as to scientists working at DBT/DST-aided autonomous institutions who benefit directly or indirectly from the infrastructure and core funding provided by DBT/DST.”**

16.1. CIS strongly supports the inclusion of scientists and researchers into the scope of the Policy.

16.2. It is submitted that extending the scope of the Policy to apply to direct beneficiaries as well as indirect beneficiaries of DBT/DST funding/infrastructure shall ensure open access to a large amount of invaluable research.

16.3. The clause may be amended as follows:

“This policy applies to individual scientists/researchers/institutions who have directly received ad-hoc funding or other support/benefits/infrastructure from DBT/DST as well as to scientists/researchers working at DBT/DST-aided autonomous institutions who benefit directly or indirectly from the infrastructure and core funding provided by DBT/DST.”

**17. “The principal investigator (PI) or someone authorized by the PI, or anyone authorized by the head of the institution where the work is carried out (such as the librarian), can deposit the papers. Both the PI and the head of the institution will be responsible for timely deposit of the paper.”**

17.1. CIS supports the process chalked out to deposit the papers.

17.2. It is submitted that a formal procedure shall ensure efficient and timely deposit of the

papers.

### **Depositing in a repository is mandatory**

**18. “Unless the deposit ID is quoted in the project report as well as in future proposals for funding, the proposals will not be considered.**

**Unless the deposit ID is quoted in the project report as well as in future proposals for funding, the proposals will not be considered.**

**In the rare case where the PI or head of the institution has some valid reasons for not complying with these requirements they should give a suitable explanation in the final report.**

***For research carried out in institutions under the administrative control of DBT/DST:***

**Authors of papers that will have no such deposit ID shall not be considered for promotion/appointment/ award/Fellowship/Research Grant.”**

18.1. CIS supports the procedure to ensure mandatory deposits in a repository.

18.2. It is submitted that creating unique deposit IDs shall ensure that the PI or head of the institution oversees the process of making a paper open access more efficiently. Further, the clause incentivises authors to gain a deposit ID by depositing their papers in a repository, thereby maximizing open access.

### **How to deposit?**

**19. “In case of IRs, the IR administrator (and his/her team) will deposit the material on behalf of the authors. If one wants to deposit the material in the central repository, the author (or one of the authors in case of many) should forward the material to the administrator of the central repository. Those who want to self-archive in an IR may obtain the credentials from the administrators.”**

19.1. The clause prescribes the methods prescribed in the Policy to deposit a paper.

19.2. However, CIS believes that depositing papers in the Central repository should be mandatory, since tie-ups with the institutional repositories may fail or get delayed. The Policy should aim at reducing administrative barriers in interest of making papers open access in the least amount of time.

### **Copyright**

**20. “In case the scientist produces research as part of her employment with a government body, the copyright vests in the government body, unless otherwise agreed upon to the contrary. Therefore, if the copyright continues to vest in the Government, transfer of rights would have to be by the Government, or by the scientist after prior permission from the Government. If the research has been produced by the scientist in the course of her employment with any institution, copyrights vests in the institution concerned, unless otherwise agreed upon to the contrary. The institution should retain the right to make the articles freely available *gratis*, whether the journal is open- access or subscription-based.”**

20.1. CIS strongly supports the Policy in regard to informing the author about their ownership rights in the research.



20.2. CIS strongly supports a legal arrangement whereby the author is transferred complete copyright in his/her work; and the Government retains a non-exclusive, irrevocable and perpetual licence to disseminate the work publicly for the purposes of this Policy.

20.3. In furtherance of the preceding comment, the clause may be amended as follows:

“In case the scientist/researcher produces research as part of her employment with a government body, the copyright legally vests in the government body, unless otherwise agreed upon to the contrary. In the interest of the authors, the Government will transfer copyright in the work to the author, subject to reservation of certain rights. The Government should retain the right to reproduction of works, to issue copies of the works freely available *gratis*, whether the journal is open- access or subscription-based.”

**21. “The DBT/DST recommend/s that all authors receiving funds from DBT/DST should, at the time of returning the copyright transfer form, inform the publisher that they would retain the right to place the full-text of the final author version in the institution’s IR and DBT/DST Central. This can be achieved by attaching to the copyright transfer agreement the DBT/DST author addendum.”**

21.1. CIS strongly supports the pre-condition to be placed by the authors before the publisher before permitting publication of their papers.

21.2. It is submitted that retaining the right to deposit papers in the appropriate repositories shall ensure open access to research produced by the authors, and place a legal obligation on the publisher to honour the principle of open access by virtue of the copyright transfer agreement.

#### IV. CONCLUDING OBSERVATIONS

22. The Centre for Internet and Society welcomes the opportunity to comment on the proposed Open Access Policy of the Department of Biotechnology and Department of Science and commends the Ministry of Science and Technology, Government of India for its initiative in seeking inputs from the stakeholders.

23. To that end, reiterating its commitment to the values of access to knowledge, openness, freedom of information, protection of general public interest and safeguarding various stakeholders’ interests and rights, the Centre for Internet and Society presents the following concluding observations:

a. That the Policy uses the phrase “made publicly available as soon as possible, subject to limitations prescribed under Indian laws” to adequately convey its purposes.

b. That the Policy may create various mechanisms for underwriting reasonable publication charges for articles written by its faculty and published in fee-based open-access journals and for which the respective institutions would not be expected to provide funds. The mechanisms are as follows:

(i) DST/DBT may insert a provision to factor Article Processing Charges into the researcher’s grant; or

(ii) DST/DBT may establish an OA Publishing Fund. Funding may emerge from

potential sources such as the institutional research division responsible with tracking and managing grant funding.

(iii) DST/DBT may purchase an institutional membership with OA publishers.

c. That the Policy should clearly distinguish between journal impact factors and title of the journal in respect of assessing the quality of the publication

d. That to ensure that ends of open access completely meet; the papers should be mandatorily deposited in a central online repository (established by DBT/DST) which is freely accessible to the public i.e. following the Green OA route *in toto*.

e. That non- peer reviewed works produced at DBT/DST, in addition to peer reviewed works also be deposited by the authors and therefore be included in the appropriate clause.

f. That to ensure that the full-text, meta data and supplementary material is deposited in a machine readable format thereby permitting accurate search across the open access infrastructure; The policy may develop a more rigorous plan for creating adequate infrastructure to ensure interoperability.

g. That the Policy may consider using DOI to establish a robust infrastructure.

h. That the manuscript may be mandatorily deposited a central online repository, in addition to the grantee's own institution's interoperable institutional repository to ensure that ends of open access are met.

i. That the copyright should vest with the author and the Government may retain rights to reproduction of the work in order to issue free copies of the work to the public.

j. That certain sentences be suitably modified, as discussed in the preceding sections of these comments.

k. That the Policy fails to establish a target timeline to achieve the objectives and setting up of required infrastructure, thereby rendering the collaborative obligations and duties of various stakeholders undefined. The Policy may insert a clause for the same as follows:

**“Targets of the DST-DBT Open Access Policy Implementation (broadly):**

1. Conclude the final terms and conditions of the Policy by <insert date>.
2. Create a central online repository for authors to submit their material by <insert date>.<sup>17</sup>
3. Encourage institutions to create respective institutional repositories.
4. Create a website with a user-friendly interface to enable access to the public by <insert date>

<sup>17</sup> See “[Streamlined Manual Deposit Progress](https://wiki.library.ucsf.edu/display/OAPI/Streamlined+Manual+Deposit+Progress)” available at <<https://wiki.library.ucsf.edu/display/OAPI/Streamlined+Manual+Deposit+Progress>> (last accessed August 4, 2014)

1. That the Policy fails to address the remedies for non-compliance of its terms and conditions by any party i.e Government, institution, researcher/scientist. A clause may be inserted as follows:

**“Compliance**

*Researcher/scientist*

1. In the event of the researcher/scientist entering into an agreement with a journal publisher, which stipulates unreasonable conditions on the accessibility, thereby being incompatible with the Policy, the terms of the Policy shall have an overriding effect with regard to making the material publicly accessible.

*Institution*

2. The institution shall facilitate and assist the author in depositing the required material in the central online repository.

*Government*

3. The Government shall enter into a copyright transfer agreement with the author contemporaneously along with the conclusion of the employment agreement, and agree to transfer the copyright to the author whilst reserving a non-exclusive, irrevocable and perpetual right of reproduction and dissemination of the material deposited. In the absence/violation of a copyright transfer agreement, the Policy grants the researcher/scientist the copyright in the material so authored.”

24. The Centre for Internet and Society would be willing discuss these submissions with the Ministry of Science and Technology, Government of India; and supplement these with further submissions if necessary, and offer any other assistance towards the efforts at developing an open access policy for the DBT/DST.

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**On behalf of the Centre for Internet and Society**

**Nehaa Chaudhari**

**Anubha Sinha**

**August 19, 2014**