

IUCr response to the *Global Information Commons for Science Initiative*

The Global Information Commons for Science Initiative (GICSI) is a multi-stakeholder initiative arising from the second phase of the World Summit on the Information Society in Tunis in November 2005, with an overall goal of accelerating the development and scaling up of open scientific data and information resources on a global basis.

The International Union of Crystallography (IUCr) acknowledges the importance to the scientific endeavour of full and equitable access to scientific information. It therefore warmly endorses the goals of the Initiative, and supports the proposed implementation, subject to a sound business model and effective management by its participating stakeholders.

The IUCr recognises the Initiative's strong emphasis on the principle of open availability as an ideal medium of dissemination for publicly funded research findings and data. However, the IUCr itself is one among many organizations that provide high-quality value-added publishing and data services, historically funded through subscriptions, direct sales and other commercially mediated mechanisms. Although the IUCr is experimenting with various routes towards open availability, it is not clear that this can always be achieved, or that it is invariably the best solution.

The IUCr's continuing and proposed contributions to fostering a global information commons through its publishing and data activities include:

1. Continuing the practice of supplying free of charge the primary research data, machine-readable sets of atomic coordinates and structure factors, and other supplementary documents supporting the primary research results reported in its scientific journals.
2. Continuing the practice of providing open access to education papers, software application papers and Commission reports published in those journals.
3. Continuing to provide means such as the IUCr Journal Grants Fund and involvement with a commercial partner in INASP programmes to maximise the availability of low-cost subscriptions to developing nations.
4. Continuing its current hybrid open-access/subscription model to provide authors with an opportunity to pay production costs for their articles and thereby allow them to be accessed freely.
5. Continuing studies and projects towards the introduction of full open-access publication under an appropriate economically sustainable model.
6. Investigating the possibility of commissioning and implementing high-quality open-access reference resources through collaborative Web tools.
7. Formalising a machine-readable set of licensing terms stipulating re-use and redistribution of primary and derived data sets modelled on Science Commons paradigms.
8. Continuing to offer the *checkCIF* service as an objective tool for assessing the quality of crystal structural data, and encouraging cross-checking of data-based results through a diversity of publicly documented programs.
9. Working with the crystallographic databases to try to ensure that individual researchers in the least developed countries can get access to the databases.
10. Promoting the development of open-source collaborative computational projects in crystallography.
11. Promoting the open documentation of algorithms and computational techniques employed by software in reducing, analysing and transforming crystallographic data, even for closed-source applications.
12. Encouraging sharing of research material and tools across the international scientific community.

The IUCr proposes to work in support of the organizations on which it is directly represented (ICSU, CODATA, ICSTI) to realise the goals of GICSI in a manner which is sustainable within the IUCr's approach to publishing, data collection, organisation, curation and archiving.

A position paper providing further details of the IUCr response to the *Global Information Commons for Science Initiative* is available from the IUCr web site at <http://www.iucr.org/iucr-top/iucr/gicsi/>