

Grey Literature in Energy: 5 Years Later

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Abstract

At GL'99, the Department of Energy's Office of Scientific and Technical Information (DOE OSTI) presented a paper titled "Grey Literature in Energy: a Shifting Paradigm." Five years later, the paradigm continues to shift, less radically than the change from paper and microfiche to electronic, but with significant benefit to users worldwide. OSTI's efforts continue this shift, moving even further away from the connotation of 'grey' as meaning 'hard to get' literature. Along with its domestic and international partners dealing with science and energy information, OSTI serves as a leader in tools for accessing grey literature in addition to its role as a major repository. The paper will highlight the collections, tools, and partnerships that have allowed OSTI to truly bring science and energy information to the computer desktop.

OSTI first and foremost partners within DOE. Energy-related grey literature residing at OSTI, along with the grey literature residing at other locations throughout the DOE complex of laboratories, is made available and searchable to the public through OSTI IT systems. While this is not new, several related developments are, including OCR steps for image data, remote indexing, and single page searching. Recently, special initiatives with Google and Yahoo/MSN in the past year have resulted in users now being able to find DOE's grey literature residing within OSTI databases when using these browsers. Providing yet a further avenue, OSTI's latest initiative involves the possibility of joining CrossRef, meaning that Digital Object Identifiers (DOI's) traditionally associated with published literature may soon be assigned to DOE's grey literature collection.

Partnerships with other U.S. federal agencies have resulted in a massive collection of science-related grey literature being available through a single interface. Offered to users initially through the GrayLIT Network developed by OSTI, this has now been broadened further through the e-government success story known as Science.gov. 'Deep Web' searching allows users to go beyond the typical browser in searching web pages, down to the database and full text levels and then across U.S. government agencies.

Partnerships with the International Energy Agency's Energy Technology Data Exchange (ETDE) and the International Atomic Energy Agency's International Nuclear Information System (INIS) have augmented the domestic collection into a major global resource known as ETDEWEB, managed and operated by OSTI, and the INISDB online, managed by INIS. Current OSTI and INIS efforts to convert the older microfiche collections of grey literature into electronic form will serve to advance the knowledge management and preservation initiatives of these major repositories.

It is almost hard to imagine that less than 10 years ago users requesting U.S. government reports often had to wait many days and sometimes weeks to receive their paper copies or microfiche, usually via what we today call 'snail mail.' Five years ago, at GL'99, the Department of Energy's Office of Scientific and Technical Information (DOE/OSTI) presented a paper titled "Grey Literature in Energy: a Shifting Paradigm." The paper described the evolution of DOE reports delivery by OSTI from the paper and microfiche era into the electronic age of the Internet. The late 1990's saw the introduction of OSTI's DOE Information Bridge, an innovative web system that allowed users to find DOE reports and view or download the full text. In many ways, this easy access took the 'hard to get' part of the grey literature definition out of the picture. Five years after presenting that paper, OSTI remains on the forefront of technology and techniques used in making grey literature even more easily accessible in a greater variety of ways. For instance, in just the past year, thanks to two OSTI initiatives, Internet searchers using the search engines Yahoo! or Google can now find individual DOE reports showing up on hit lists. This greatly expands the typical Web surfer's ability to find DOE grey literature into the depths of the Deep web. This paper will highlight more details on these and other initiatives plus give a current state of the collections, tools, access points, and partnerships that have allowed OSTI to truly bring science and energy information to the electronic desktop.

First, perhaps a little background on DOE and OSTI is in order. As one of the largest sponsors of research and development for the U.S., DOE supports thousands of research projects annually at the many DOE laboratories and universities across the country through contracts and grants. Researchers are required to document their research results in reports and can also submit articles to journals and present papers at conferences. OSTI partners with the DOE sites to serve as DOE's central repository for DOE research results. OSTI's mission is to advance science and sustain technological creativity by making these R&D findings available and useful to DOE researchers and the American people. Through OSTI's collections and services, the DOE research results are made available to scientists, researchers and engineers in the DOE community as well as to academia, the international science community, and science-attentive citizens. In addition to DOE-funded research, OSTI also provides research information of interest to DOE through partnerships with other federal agencies and international communities.