EDITORIAL

The SciX project started in February 2002. As planned, the initial tasks included the analysis of the current models of scientific publishing, state of the art studies, a survey of the available technologies and tools as well as the analysis and the design of the pilot system. The results of this work are published in the reports which will be available on the SciX Website - all SciX deliverables are public. This newsletter is bringing some of the highlights.

Another important mission of the SciX project is to find out how communities of scientists respond to the idea of free and open publishing and how they can be engaged in these efforts. The Members of the SciX consortium presented the project at several conferences and workshops, both from their core field of work (architecture and engineering) as well as at those related to digital libraries. The feedback was enthusiastic and several communities will work together with SciX to establish their digital libraries and archives.

The papers published at these conferences and in various journals, as well as lots of other information is available at the SciX website at **www.SciX.net**.

PROCESS MODEL FOR SCIENTIFIC PUBLISHING

The scientific publishing process is currently undergoing the strongest paradigm shift since the invention of the printing press over 500 years ago. The current shift is caused by the advent of a new technology, the Internet, which radically changes the technological and economic infrastructure of the process. Already after only a few years it has strongly affected the behaviour of all involved stakeholders. It particularly the roles of two intermediaries, who stand between the original producers of the "product" (the scientific paper) and its consumers, are under question. These are the publishing companies and the scientific libraries.

In the SciX project a formal **process model** of the scientific publishing process is being developed. This model tries to capture the activities of all in-

volved stakeholders, and to clarify them. The aim is to later use this model as the basis for empirical estimates of the costs of alternative business models.
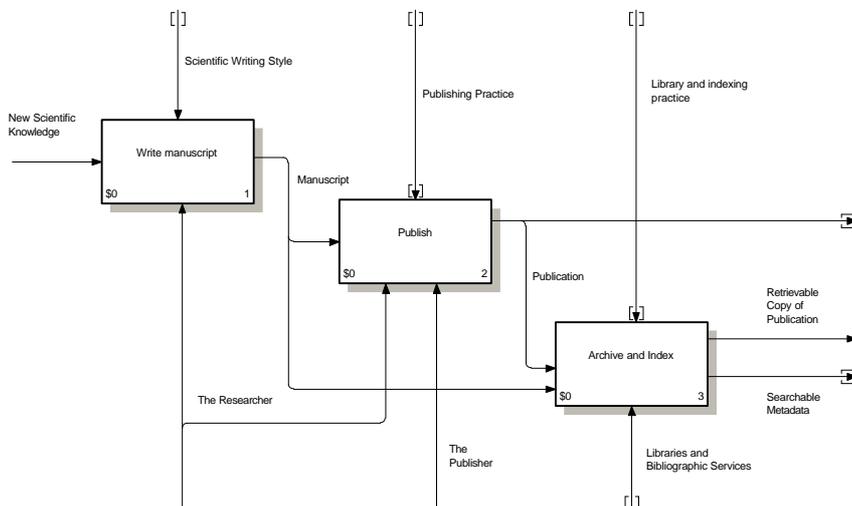
The model explicitly includes the activities of all the stakeholders in the overall process, including the activities of the:

- *Researchers* who perform the research and write the publications
- *Publishers* who manage and carry out the actual publication process
- *Academics* who participate in the process as editors and reviewers
- *Libraries* who help archiving and in providing access to the publications
- *Bibliographic services* which facilitate the identification and retrieval of publications
- *Readers* who search for, retrieve and read publications
- *Practitioners* who implement the research results directly or indirectly

The model is being developed using the IDEF0 modelling methodology. The main concepts are the activity and the flow. The flow can be used as input, output, control or mechanism. The presentation of the IDEF0 diagrams is hierarchical in a way that diagrams on lower levels are more detailed than those at top.
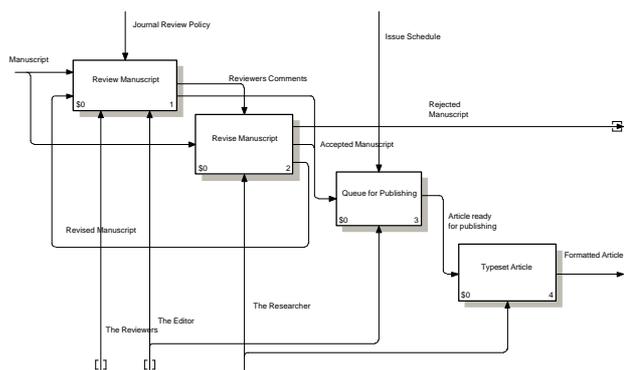
The following two diagrams (publish the results, do article-specific activities) are included to give the reader a feel for what the model looks like:

Publish the Results

This part of the model has been split up into three distinct activities, which to a large extent are carried out by different stakeholders. Based on the results of the research, the researcher writes a manuscript, which then in the next stage through a number of transformations is changed into a publication (on paper or electronic). The last activity is extremely important from a life-cycle viewpoint and involves the archival storage of the publication in research libraries all over the world as well as value-added services through bibliographic services etc.

Do Article-Specific Activities

This diagram starts out by the review activities carried out as a co-operation between the editor, the researcher and anonymous peer academics. This activity demands resources but is usually not a cost item of significance for the publishers since reviewers usually work for free. This diagram includes a very significant activity which might escape modelling in many modelling exercises that focus solely on cost or the publisher's activities. Once an article is accepted for publishing, it enters an activity called Queue for Publishing, which typically takes from half a year to a year for traditional issue&paper-based journals (the worst case this author has experienced was three years).

The current version of the Scientific Publishing Life Cycle (SPLC) model includes 19 separate diagrams, arranged in a hierarchy up to seven levels deep. The detail will be available in the deliverable D1 - Scientific publishing: as-is business and information model.

SCIX ON THE ROAD

The SciX coordinator took part at the EC/NSF Digital Library All Project Meeting in Rome (March 2002). Several valuable contacts were established. The works of some of the presented projects are being studied in greater detail for possible synergies with SciX (e.g. the Open Archives Forum).

As an institution strongly involved in many international organisations dealing with architectural computing and education, the Vienna University

of Technology has been spreading the SciX message at several conferences and workshops. At the CAADRIA 2002 conference (Kuala Lumpur, April 2002 / www.caadria.org) an idea to set up Digital CAADRIA Proceedings using the SciX technology was presented. Furthermore results of a retrospective content analysis regarding the topics of CAAD and referencing were presented. The CAADRIA-board will support the SciX-work in the future by means of annual contribution of recently released proceedings. In other parts of the world, contacts with CAAD-Associations such as ACADIA (www.acadia.org) and SiGraDi (www.sigradi.org) are established on making their proceedings available as e-papers.

SciX presentations took place or will shortly take place at the following conferences:

- ELPUB 2002 Conference, Karlovy Vary, Czech Republic (forthcoming).
- EAPPM conference "ECPPM - eWork and eBusiness in AEC", Portoroz, Slovenia, September 9-11, 2002.
- eCAADe 2002 Conference, Warsaw, Poland.
- ACADIA 2002 Conference, Pomona (LA), USA.
- 7th CAADRIA Conference, Kuala Lumpur, Malaysia.
- CIB W78 seminar "Distributing knowledge in Building", Aarhus, June 2002.
- SciX project was also featured in the CULTIVATE Interactive Journal

Most full texts of these papers are available through SciX website.

INDRA STRENGTHENS THE TEAM

In March 2002 Atlante (a partner in SciX), the e-business solution and subsidiary company of Indra returned to its origins. In 1999, the company was created and renamed from Indra-net to Atlante by Indra as a way to focus its activity on providing end-to-end e-business solutions, as much from the consulting area as from the development of e-business solutions.

Nowadays e-business services and consulting become a part of the critical core of the IT companies like Indra. To this responds the integration of e-business capacities of Atlante in Indra. Indra is the leading Spanish company in Information Technologies (IT). In 2000, the company generated revenues of 676.8 million of euros and a backlog of orders in excess of 970.1 million of euros.