

The Third IFIP WG 9.7 Working Conference on  
**History of Nordic Computing**

# **HINC3**

**18 - 20 October 2010**

**Stockholm, Sweden**

<http://dsv.su.se/hinc3/>

## **Call for Contributions**

The first and second conferences on the history of Nordic computing, organized in Trondheim (2003) and Turku (2007) respectively, were very successful and acquired a great deal of interest from information and communication technology (ICT) professionals and academics as well as from historians of technology. Therefore, these conferences will now be followed by a third one, which will take place in Stockholm, October 2010. The conference will also honour the successful completion of a project on Swedish ICT history. Called "From Computing Machines to IT", the Swedish Computer Society initiated the project with the support of the Division of History of Science and Technology at the Royal Institute of Technology (KTH) and the National Museum of Science and Technology.

The conference is organized as an activity within IFIP's Working Group 9.7 (History of Computing) of its Technical Committee 9 (Relationship between Computers and Society). It is sponsored and organised jointly by the Department of Computer and Systems Sciences at Stockholm University and the Swedish Computer Society. Sponsorship is being sought also from Nordic private companies.

Although humans have dealt with computing since the day someone felt the need to count on one's fingers, the history of modern computing began some sixty years ago. In the Nordic countries as well as in most other places, it started shortly after the Second World War with efforts to design and build computers for military/industrial calculations and data processing. From there, information technology has spread into and penetrated all areas of society. Hence today, ICT is employed in areas ranging from the control of machinery and production lines in manufacturing, to business administration and office applications, and to e-health and e-government applications. Additionally, the private lives of people have been heavily affected by mobile phones and personal digital assistants. The internet and the World Wide Web offer information at one's fingertips, not to mention computer games, multimedia, and other interesting applications.

In other words, there is no question that computers and information technology have had a tremendous effect on the Nordic countries and societies, not only technically, but also socially and culturally.

How did all this happen? The HiNC conferences contribute to answering this question.

There seems to be a Nordic consensus that ICT can and should be used for the benefit of members of society. This belief has led to the acknowledgment that the Nordic countries are now among the most ICT-dense countries in the world. Education in ICT in schools and in universities focuses not only on the technical aspects of computers and programming, but also on economical, organisational, human, and social aspects. In this way students obtain a broad view of ICT and its applications.

Nordic developments in hardware, software, and methodology were farsighted and successful. The Nordic countries can claim to have hosted initiatives to develop and standardize the programming language Algol, to establish a theoretical approach to the analysis and development of information systems, as well as being the originators of object-oriented programming and object-oriented development. These are only three examples. Many more are to be found in theoretical computer science as well as in practical applications of computing technology.

## Aims and Scope of HiNC3

Nordic computing started with hardware development such as the BESK, DASK, NUSSE, ESKO and other machines. From there it has evolved into all aspects of information technology development and use. When contemplating the past sixty years, a number of questions may be asked:

- Why and how did we arrive to the position where we are now? Could we have done better or otherwise?
- What, in the past, did we do well and which decisions were less fortunate?
- What can we learn from the past? How should we continue in the future?

Consequently, the aim of this conference on Nordic computing history is

to re-examine our past and to extract experience and knowledge that we may use **to make wiser decisions about future endeavours** in developing and making use of information technology in the Nordic countries.

At large, the HiNC series of conferences provides a vehicle for bringing together Nordic collective memory regarding development of hardware and software as well as methodology and areas of usage of computers. However, while development of technology is fairly well documented, less is written about the development of its use and about the ways in which ICT usage and users are affected by the technical development. Therefore, HiNC3 will focus upon two themes.

### 1. The application and use of ICT. Areas include

- Private enterprise
  - Banking and finance
  - Commerce
  - Retail industries

- Manufacturing
- Transportation
- Media and art
- Industrial automation
- Telecommunications
- Public administration
  - (e-)Government and citizen participation
  - Health care
  - Schools and higher education
  - Archives, libraries and museums
  - Defense
- The individual's personal use

**2. How the conditions for the development and use of ICT systems have been affected by technical progress in areas such as:**

- Networks and decentralization
- Software and systems development tools
- Human computer interaction

The historical period that will be at the centre of attention at the conference covers the period from around 1970 until around 1995. This leads up to the beginning of the era of the internet and global networks.

Taking themes 1 and 2 above into consideration, the general conference topic areas include a wide range of aspects of computing. The following, non-exclusive list of anticipated paper topics may guide potential contributors.

- Development of computing and working life
- Development of computing and democracy
- Development and exploitation of personal computing
- Development and exploitation of network applications
- Development and exploitation of office applications
- Developments and exploitation of industrial applications
- Development and exploitation of embedded computing
- Development and exploitation of management applications
- Development and exploitation of computing in education
- Development and exploitation of multimedia applications
- Development and exploitation of software products for a market
- Development of information systems theory and methodology
- Development of education and curricula
- Development of systems development tools
- Development of databases and data modelling
- Development of systems development as an engineering discipline
- Developments in software process assessment and improvement
- Research achievements of historical interest
- Interesting case studies and histories
- Computer pioneers
- Pioneering applications
- Historical conflicts and their resolution
- Artistic development work

## Invitation to Contribute

The Program Committee of HiNC3 solicits suggestions and contributions of the following types.

1. Submitted papers (not more than 3500 words) or extended abstracts (between 500 and 1000 words) about historical aspects of computing in a Nordic country. The papers should conform to the aims and scope of the conference (see above). Authors who submit an extended abstract must provide a full (draft) paper by 1 June 2010.

A typical paper could either account for the development of some important system or product, some important decisions or events, or it could analyse some important trend or generic development over time. It could also deal with establishment and activities of relevant ICT-oriented organisations in the Nordic countries. In all cases it is, however, important in the paper to include a discussion that makes general conclusions concerning the outcome of the particular endeavour.

2. Other suggestions (e.g. for panels or tutorials) that will make HiNC3 an interesting and stimulating conference.

A highly eligible contribution would be one or more papers or a panel presenting and/or comparing different approaches and projects to exploring and recording ICT history in the Nordic countries.

Contributions must be submitted **no later than 19 March 2010**, and this is a firm deadline. All contributions **must be entered to the [conference management system](#) (preferably)** or directed directly to the HiNC3 Program Committee via email at [hinc3pc@dsv.su.se](mailto:hinc3pc@dsv.su.se).

Papers and suggestions must be submitted in pdf or MsWord.

The conference language is English.

In order to be included in the program, the authors must register for the conference and pay the conference fee no later than 1 June 2010. A selection of papers will be included in the conference post-proceedings edited by Wangler, Lundin and Impagliazzo. The post-proceedings will be published by Springer. Authors will be **required to sign an Assignment of Copyright to IFIP and Author's Warranty to Springer**. Before the conference, attendees will be provided a set of abstracts. The conference fee will include the shipment of the post-conference publication.

## Important Dates

<b>28 February 2010</b>	Deadline for contributions (extended abstracts or papers and suggestions). Mail to <a href="mailto:hinc3pc@dsv.su.se">hinc3pc@dsv.su.se</a>
<b>15 April 2010</b>	Notification of acceptance
<b>15 May 2010</b>	Author pre-registration
<b>1 June 2010</b>	Final draft papers due
<b>1 September 2010</b>	Program finalised and distributed
<b>18 – 20 October 2010</b>	Conference in Stockholm
<b>1 December 2010</b>	Final papers and discussion summaries due
<b>Spring 2011</b>	Post proceedings published by Springer

## Conference Organisation

- General Conference Co-chairs:** Janis Bubenko Jr, Prof. em., KTH, Stockholm  
Per Olof Persson, Athena Konsult, Stockholm
- Program Co-chairs:** Benkt Wangler, Prof. em., Univ. of Skövde  
Per Lundin, Division of History of Science and  
Technology., KTH, Stockholm
- Organizing Committee Co-chairs:** Gunnar Hesse, former CEO, Unisys Nordics  
Anita Kollerbaur, former head of department, DSV,  
Stockholm
- IFIP Representative:** John Impagliazzo, Prof. Qatar Univ., Doha, Qatar

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*(Further members to be added from academia and industry from all Nordic countries)*

## **Organisation Committee**

Gunnar Hesse (co-chair)  
Anita Kollerbaur (co-chair)  
Karl Kajbjer

*(Further members to be added as preparations proceed)*

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