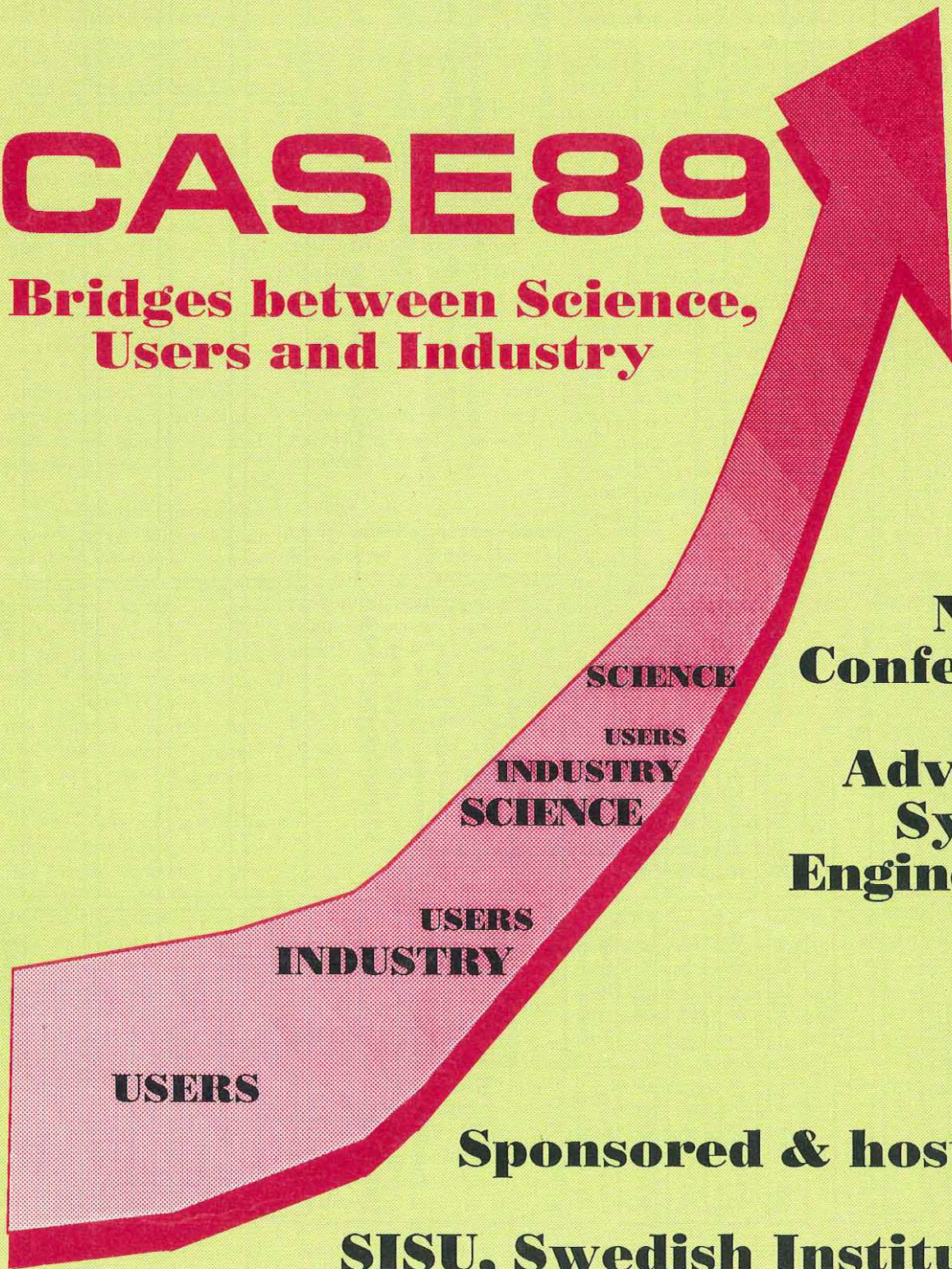


**9 - 11 May, 1989
Kista,
Stockholm,
Sweden**

CASE89

**Bridges between Science,
Users and Industry**



**The
first
Nordic
Conference
on
Advanced
Systems
Engineering**

Sponsored & hosted by

**SISU, Swedish Institute for
Systems Development
&**

**SSI, The Swedish Society for
Information Processing**

CASE89

The first Nordic Conference on Advanced Systems Engineering will be held in Stockholm, Sweden, May 9-11, 1989. The conference is jointly organized by SSI, the Swedish Society for Information Processing (associated to IFIP) and SISU, the Swedish Institute for Systems Development.

The conference will be jointly chaired by Ms Agneta Qwerin, head of SSI, and Prof Janis Bubenko Jr, SISU, RIT and University of Stockholm.

Background:

The area of systems development is rapidly evolving, both from theoretical and practical points of view.

The scientific community is currently undertaking qualified research concerning systems development topics in a variety of contexts. The value of this research is obvious and it is widely felt that the everyday practitioners' work in analysis, design and implementation would benefit from speeding up the knowledge transfer process.

New tools and methods are continuously put into practical usage. It is, however, felt that the necessary feedback from the field of practitioners is meagre. Moreover, central problems in the field of practitioners, well suitable for scientific treatment, are never made known to the scientific community.

There exists an urgent need to speed up the sharing of knowledge and to prepare for the building and dispersal of know-how in order to properly master and control future systems development efforts.

Kista

- "a Swedish Silicon Valley"

Kista is a Stockholm suburb. It has the greatest concentration of IT-workers in Sweden.

Aim:

The basic aim for the CASE89 conference is to *bridge the gap between the industry and the research communities by increasing mutual understanding of problems and possibilities.*

The conference will concentrate on exposing current trends and possibilities in the research field to the practitioner - as well as indicating current practical problems and actual experiences of methods and tools for the research community.

Another aim is to expose the growing market of software tools for systems development, and the basic thinking behind these, to those interested.

The conference will also touch on the topic of needed knowledge development in the field of practitioners, paving the road for fast accommodation of future research results.

Shortening the time span between publicity of research results and practical application is mandatory.

Electrum

- location for the CASE89 conference

Electrum in Kista is a building complex gathering institutes and university level education within the IT (Information Technology) area. SISU one of the hosts for the conference has its offices here. SICCS, the Swedish Institute for Computer Science and IM, the Swedish Institute for Microelectronics are also located here. Parts of the Royal Institute of Technology, are situated here and the department for Computer and Systems Science is tentatively moving in this summer.

SISU

- Swedish Institute for Systems Development.

The purpose of SISU is to act as a bridge between research institutions, such as universities and institutes of higher learning, and the world of industry, business, and administration. The primary goal of SISU is the development of a high level of competence for information systems development throughout the public and private sectors.

SISU is jointly supported by the National Swedish Board for Technical Development (STU) and by the Association of Supporters of Information Systems Development in Sweden (ISVI). There are currently 37 members of ISVI, representing government departments, public and private industries.

Further information:

Marianne Sindler,
+46-8-7521600
Box 1250,
S-164 28 Kista,
Sweden.

SSI

- Swedish Society for Information Processing

SSI is an association for professionals within the information processing field as well as the research and education fields. SSI works with activities aimed at professional development for its 2.800 members.

SSI is a member of IFIP, the International Federation for Information Processing.

Further information:

Eva Lindberg,
+46-8-248555
Box 399,
S-101 25 Stockholm,
Sweden.

Sponsors

SISU's participating organizations are all sharing an interest in building and disseminating knowledge within the information technology area, where CASE is a very central focus of interest.

ABB DATA,
ARTHUR YOUNG,
AUGRUPPEN,
DATA LOGIC,
DIGITAL,
ENEA,
ERICSSON,
FÖRSVARETS RATIONALISERINGSINSTITUT,
FÖRSVARSTABEN,
IBM,
INFOLOGICS,
IRM CONSULT,
KOMMUNDATA,
MANDATOR,
MIMER SOFTWARE,
PEAB,
POSTEN,
PROGRAMATOR,
RIKSSKATTEVERKET,
SAAB-SCANIA,
SAS DATA,
S-E-BANKEN,
SKANDIA,
SKF,
SPADAB,
STATSKONSULT,
STATSKONTORET,
SÖDRA SKOGSÄGARNA,
TELEVERKET,
TELUK TEKNIK,
UNISYS,
VATTENFALL,
VOLVO-DATA,
VOLVO LASTVAGNAR,
VOLVO PERSONVAGNAR

If you are an employee in one of the mentioned organizations you should contact your "SISU-contact person" to obtain information about the very favourable conditions for your participating

Stockholm - in springtime

Early May is a period when spring is under way. Light green and early flowers make the City still more attractive. Often it is a period of sunshine but be prepared for rain.

The City offers plenty of beautiful views with many waterfronts.

There are numerous restaurants catering to different tastes and spending levels.

Shopping and sight-seeing are easy and varied.

Organization

Executive program committee

- Björn Nilsson, SISU, chairman
- Håkan Dahl, ABB Data
- Christer Dahlgren, Ericsson
- Kurt Gladh, Electrolux
- Lars Swärd, SAS
- Örjan Odelhög, Data Logic

Program committee - support group

- Benkt Wangler, SISU
- Mattias Hällström, SISU
- Erik Knudsen, SISU
- Bertil Andersson, Swedish Telecom

Organising committee

- Lars Bergman, SISU, chairman
- Eva Lindberg, SSI
- Marianne Sindler, SISU

The work done back-stage

As this is a conference aiming at building bridges between science and practice a few words about the process behind CASE89 may be clarifying.

In late summer 1988 call for letter-of-intent for papers was sent out. December and January 1989 submitted papers were reviewed normally by three persons selected on basis of familiarity with the subject. In the reviewing process was indicated what categories the paper would be applicable for. The main categories are: scientific contribution, experience report, methods presentation and product presentation. - In the conference program those categories are mixed and the papers are presented in sessions based on subject.

February 17 the executive program committee made the final decisions about the program.

Language

The conference language is English.

Dead-lines

April 2 is last date for the 10 % deduction for early registrants.

April 28 is the date up to which we are sure to send confirmations. After that we are of course trying to.

Hotel accommodation is scarce. A fast reservation is recommended.

A Conference Credo

In Sweden many organizations find themselves in a very important decision process concerning CASE-tools. We feel it is important to broaden the perspectives around this decision. - The most common pitfall here is to regard the decision as a choice between different CASE-tools. We wish to emphasize that the decision concerns methods as well as tools, that is to say the software engineering process. Introducing CASE makes necessary a considerable investment in knowledge. We perceive that organizations entering the CASE scene are at the beginning of a maturity process which is important to be aware of in order not to make too many mistakes en route.

The perspectives of the future are also important knowledge concerning CASE-decisions. What will the industry present tomorrow? Our reasoning says that the products we see today are going to be challenged by an outflow of greatly improved products and new features in today's products. Advances during the next decade is in the hands of "Industry". We also perceive that new products and advanced features of new products are invented in research centers and in research oriented companies which are often spin-offs from research institutes. Today's scientific prototypes will constitute the basis of the tools and methods presented by industry the day after tomorrow, that is to say in the mid 1990-s.

Conference Highlights

The conference is organized in two parallel sessions. You are free to choose between them.

Session themes

May 9

- On problems in systems development
- CASE in theory and practice

Tools • and methods

May 10

- Systems development models
- CASE tool structures
- CASE tool comparison methods
- Business systems modelling

Man-Machine • Interface

Modelling •

May 11

- CASE - to dare or not to
- Information resource management in practice

Knowledge • based systems

Tools • and Methods

Social Events

Get together the evening of May 9.

Conference dinner in a very Swedish setting the evening of May 10.

Mini Tutorials

May 9

On the future of modelling
- why current CASE-tools insist on supporting 20 years old methods.

Professor Colette Roland of Sorbonne, France.

May 10

On the future of CASE-tools.

Frans van Assche of James Martin Associates, Belgium.

May 11

Organisational implications caused by the fourth generation environment.

Simon Holloway of DCE, United Kingdom.

Conference schedule

May 9
9:00 check-in
10.00 Opening
17.30 get-together party.
Bus transfer to hotels and Stockholm City

May 10
9:00 Start
18:00 appr. bus transfer to Conference Dinner

May 11
9:00 Start
16:30 Bus transfer to Airport & Stockholm City

10:00 OPENING SESSION

On the future of modelling- why current case-tools insist on supporting 20 years old methods and techniques. Professor Colette Rolland, Sorbonne

ON PROBLEMS IN SYSTEMS DEVELOPMENT

- **Systems Development: - Basic flaws in the current culture. - Ideas for rectifying some of the problems.**

Michael A. Kingsbury, N. Staffs Polytechnic, Stafford, United Kingdom

Systems Development - an idea presentation.

- **The Mistakes - where systems development does not support business goals.**

Torsten Bergkvist, Swedish Telecom, Uppsala, Sweden

An personal Idea based on experience.

CASE IN THEORY AND PRACTICE

- **Information Systems Development: A Frame of Reference and Classifications.**

Anders G. Nilsson, Institute V, Stockholm, Sweden

CASE tools and system development models.

- **A framework for use and classification of CASE-tools in systems analysis and a strategy for implementation.**

Ingemar Lindqvist & Jan Hernbäck, Hernbäck & Lindqvist Konsult AB, Stockholm, Sweden

A methods presentation for the systemizing of the application area for CASE-tools.

- **A CASE study in object-oriented knowledge-base design using the KIWI system.**

Dirk Vermeir, Univ. Instelling Antwerpen, Wilrijk, Belgium

- **Using PSL/PSA to Model Information System Planning for The United States Department of the Army Headquarters.**

Paul D. McDaniel, U.S.Army, Virginia, U.S.A.

An experience report on: Enterprise Modeling with PSL/PSA.

TOOLS & METHODS

- **The broad tool - Foundation**

Björn Ivar Danielsen & Espen Brodin, Arthur Andersen & Co, Oslo, Norway.

A presentation of Systems development with CASE-tools and methods.

- **SVEA - A user driven and data driven systems development method.**

Ing-Marie Stenström, IRM Consult AB, Bromma, Sweden

A presentation of a systems development model.

- **Information Systems Development Supporting Methodologies With Computerized Tools.**

Bernt T. Boström, EPOC System AB, Stockholm, Sweden

A methods and tools presentation: CASE tools and system development models.

- **Computer Aided Database Design.**

Lore M. Kern-Bausch, GEMAP mbH, München, West Germany

A presentation of: Conceptuel Modelling Tools

- **How to succeed with the CASE-tool "DEFT" on the Macintosh.**

Christina Lagerkvist, AB Programator/ ITR Institute, U.S.A. & Åke Nyberg, Infotool, Stockholm, Sweden

An experience based presentation of CASE-Tools and Methodology.

REGISTRATION STARTS 9:00

Professor Rolland is currently at the University of PARIS-Sorbonne. She obtained her doctors degree in 1971 and has been doing research in Computer Science since 1976. She now leads a research team on data bases and information systems on the topics of design models, specification languages, design methodologies and computer based design tools.

Colette is council member of AFCET (the french computing society) which she represents on IFIP TC8. She also acts as a consultant of the European Commission and for NATO. She has published many books on data bases and information systems and has served as the editor of two international conference proceedings.

PROGRAM COMMITTEE

- Bertil Andersson, Ph.D., Swedish Telecom
- Frode Aschim, SYSDECO A/S, Oslo
- Erik Frökjaer, adjunkt, Datalogisk Inst, University of Copenhagen
- Mats-Åke Hugoson, Prof., CTH / Programator AB, Göteborg
- Christer Hultén, Ph.D., University of Stockholm, Neotech AB
- Carl-Gustaf Janson, Ph.D., SYSLAB, University of Stockholm
- Hannu Kangassalo, Dept of Computer Science, University of Tampere
- Anita Kollerbaur, Ph.D., University of Stockholm
- Bengt Lundberg, Prof., University of Gothenburg
- Kalle Lyytinen, Prof., University of Jyväskylä
- Lars Söderlund, Ph.D., University of Stockholm, Neotech AB
- Arne Sölvberg, Prof., NTH, Trondheim

ON THE FUTURE OF CASE TOOLS Franz van Assche, James Martin Associates, Belgium

SYSTEMS DEVELOPMENT MODELS

The relationship between models, methods and system development tools (i.e. case tools and 4GL).

Lillian Dahl, FDC & Rudi Olsson, Swedish defense, Stockholm, Sweden

Presentation of a Systems Development Model which is now "standard" within the Swedish defense as well as being supported on the Civil Services side.

CASE TOOL STRUCTURES

Building a Highly Integrated Development Environment Using Preexisting Parts.

Dick Schefström, Luleå, Sweden

IB - The Information Bus: A Multilayered Object Oriented Interface Description of Information Bases for Remote Application

Björn Skjellaug, D N D, Oslo, Norway
Information Resource Management

Loosely integrated sets of CASE tools (based on experiences of building two loosely integrated CASE tool sets having advanced user interfaces).

Kari Känsälä, VTT, Helsinki, Finland

CASE tools.

PCTE - Solving CASE Data Integration.

Kim Portman, Nokia Research Center, Espoo, Finland

CASE TOOL COMPARISON METHODS

How to test and compare CASE tools.

Tapani Kinnula, SISU, Kista, Sweden

Modelling CASE environments in Systems Development.

Kalle Lyytinen, Kari Smolander & Veli-Pekka Tahvanainen, Univ. of Jyväskylä, Jyväskylä, Finland

Metamodeling and CASE tools.

BUSINESS SYSTEMS

Modelling the Business System

Paul Lindgreen, University of Copenhagen, København, Danmark

MAN - MACHINE INTERFACE

Lexivisual Interfaces - the New Look

Anita Kollerbaur, Stockholms universitet, Stockholm, Sweden

A Generic Model for Dialog Specification

Laurence Rouillé, IRISA, Rennes, France

System development models.

Use of structured system development methods and supporting CASE tools for specification of the human computer interface: What can and cannot be done.

Alistair Sutcliffe, City University, London, United Kingdom

Use of CASE tools for HCI specification.

FRAME - a concept for documentation at ABB Data

Lars Hemingstam, Kreativ Systemutveckling AB, Stockholm, Sweden

Documentation. Systems Development.

Edition of structured documents in an hypertext environment.

J.L. Vignaud, Cap Sogeti Innovation, Meylan, France

Documentation support.

MODELLING

COMIC: A system for conceptual modelling and information construction

Hannu Kangassalo, University of Tampere, Tampere, Finland

The RUBIS System

Jean-Yves Lingat, Corine Cauvet, Colette Rolland, Thomson Informatique Services, Paris, France

The income approach for conceptual modelling and prototyping of information systems.

Andreas Oberweis, Universität Mannheim, Mannheim, West Germany

Conceptual Modelling, Prototyping.

09.00 START

Frans van Assche is currently Principal Consultant and the Technical Manager of James Martin Associates Belgium.

After obtaining a university degree in Business Administration, Engineering and Management Informatics at the University of Leuven, he was employed at this university as a research assistant. He then joined Control Data Corporation (CDC) where he was one of the designers of the NIAM methodology. At the CDC Data Management Research lab he was in charge of the first CASE tool for the NIAM methodology.

At this moment, Frans is project leader of the ESPRIT project 928 (RUBRIC), of which James Martin Associates is the prime contractor, leading a consortium of academia and software industries. Frans is secretary of IFIP W8.1. He is also professor at the School of Economics St. Aloysius, Brussels, where he lectures a course on Economics of Expert System.

He has made many publications in the field of Information System Methodologies and has been consulting and lecturing in most countries of Europe, in the two Americas and the Far East.

09:00 START

Principal Consultant, DCE Information Management Consultancy. Simon Holloway is currently a principal consultant specialising in Fourth Generation systems, data dictionaries, CASE tools and analysis methods development. Simon worked for a plastics company in 1979, initially as a commercial systems analyst and then as a data analyst. He joined a life assurance company as a database administrator in 1980 and from 1983 worked for Applied Data Research as a database consultant. In 1979, Simon joined the British Computer Society's Database Specialist group of which he was the chairman from 1984 until he retired from the position in early 1988 to become vice-chairman. Mr Holloway is the author of a number of papers on data dictionaries, Fourth Generation Software and methodologies and is a graduate in Metallurgy with Industrial Economics.

ORGANISATIONAL IMPLICATIONS CAUSED BY THE FOURTH GENERATION ENVIRONMENT

**Simon Holloway,
DCE, London**

CASE - TO DARE OR NOT TO

How CASE-tools and methods relate to each other - experiences.

*Göran Lustig, SPADAB,
Stockholm, Sweden*

A 25 megaSEK investment the systems development process is at hand for Spadab.

The good CASE: a result oriented life-cycle, proper methods and supporting tools.

*Gunnar Nilsson, CAP GEMINI BRA AB,
Stockholm, Sweden*

Life-cycle, methods + CASE.

What makes CASE work?

*Miles Welter, Strategy Manager, IBM
Laboratories, Santa Teresa*

IBM's application development, trends & directions

INFORMATION RESOURCE MANAGEMENT IN PRACTICE

IRM shall support corporate objectives and must set a framework for CASE-tools.

*Jaro Potucek, Vägverket,
Borlänge, Sweden*

CASE-tools in IRM-environment

PEAB:s erfarenheter av att etablera en funktion för systemsamordning, baserad på principerna bakom Information Resource Management.

*Fredrik Runnqvist, PEAB & Örjan Grape, SAGUS AB
Järfälla & Stockholm, Sweden*

Information Resource Management

IRMA-Information Resource Management Architecture; a data-driven method used in planning the overall system architecture

*Eskil Swende, IRM Consult AB,
Bromma, Sweden*

IRM

KNOWLEDGE BASED SYSTEMS

The role of knowledge based systems to enhance user participation in the systems development process.

*Gian M. Medri, PK-Banken,
Stockholm, Sweden*

Knowledge based systems. Systems development.

A knowledge-based support system for the reuse of structured specifications and designs of embedded computer systems.

*Tuomas Ihme, VTT,
Oulu, Finland*

Knowledge-based Support for Software Reuse.

A Knowledge Based System for Requirements Capture and Analysis.

*Peri Loucopoulos, UMIST,
Manchester, United Kingdom*

Knowledge based systems in Systems Design.

An expert system for semantic and relational database design

*Mokrane Bouzeghoub, Univ.P.et
M.Curie, Versailles, France*

A knowledge-based system for embedded computer analysis & design

*Kari Hakkarainen, T.Res.Centre
Finland, Oulu, Finland*

TOOLS AND METHODS

ALGRES: An Advanced Database System for Complex Applications.

*Roberto Zicari, Politecnico di Milano,
Milano, Italy*

Advanced Database for CASE

"Glueing CASE-Tools Together in a Heterogeneous CASE-Environment"

*Günter R. Koch, Petra Luchner &
Franz Engelmann, Zi Ind. Inform.
GmbH, Freiburg, W. Germany*

CASE Integration (CASE Tools/Tool Shells)

GENERAL INFORMATION

ACCOMMODATIONS

Block reservations are made at hotels in the central parts of the City of Stockholm. The rate is 900 - 1000 SEK per night. Breakfast is normally included. Room standard includes TV, private bath and direct dial phone. Sauna bath and restaurant within the hotel premises is normal. Check-out time is normally 12:00.

Economy lodging is scarce because it is a very popular conference period. We are making efforts to get hold of rooms in this category but can make no promises at the time of printing.

Hotel reservations

Use the enclosed Conference registration/reservation form and return to SSI - CASE89 to make hotel reservation. Also contact SSI for making reservation or changes in reservations. Please reserve as early as possible.

Hotel room payment is made by you directly at the hotel. Wellknown credit cards are accepted. If you are uncertain, please contact SSI.

GROUND TRANSPORTATION

Airport

Shuttle service from Arlanda Airport to the central part of Stockholm is frequent and easy to use. Cost is around 30 SEK single direction. One shuttle line includes Kista, the place for the CASE89 conference.

Shared Limousine service is about 150-200 SEK per person.

Taxi is about 200 - 300 SEK depending on traffic intensity.

CASE89 - bus shuttle

To make your transportation easier we are arranging bus transportation during the conference.

May 9

from Arlanda Airport and from the Central Station of Stockholm to the CASE89 conference in Electrum-house in Kista.

From Electrum to the hotels and to the Central Station in the evening.

May 10,

from the hotels and from the Central Station in the morning to Electrum.

From Electrum to the Conference Dinner in the evening.

From the Conference dinner to the hotels and to the Central Station in the night.

May 11,

from the hotels and from the Central Station in the morning to Electrum.

After the closing of the Conference; to Arlanda Airport and to the Central Station of Stockholm.

Subway

You could always take the subway from Stockholm Central Station to Kista. The travelling time is around 20 minutes and you should add for a 15 minutes walk from Kista subway station to the Conference in Electrum. The fare is around 20 SEK single.

Car rental

Rental cars are available at the Arlanda Airport and through the hotels. - We do not recommend coming in car - parking space is very scarce in Kista.

OTHER TRAVEL INFORMATION

Banks and minor shopping

Kista Centrum at 5 minutes walk from Electrum provides 5 bank offices, post office and several shops.

Banking hours 9:30 to 15:00.

Shops 9:00 or 10:00 to 18:00.

PRE - REGISTRATION PROCEDURES

All Conference participants (including delegates, presenters, speakers and panelists) must register, and *advance registration is highly recommended to assure space availability and reduce cost.* Use the registration form in this program to pre-register to the conference and to make your hotel reservations.

Registration fees, in SEK (Swedish crowns):

The indicated fees include coffee, lunch, proceedings, get together party and free transportation with the bus shuttle provided by CASE89.

- Regular fee 5.800 SEK, with reduction for 2 or more persons coming from the same organisation registered on the same form.

- Students and employees of universities and equivalent organisations 1.400 SEK.

Conference dinner 400 SEK.

Premiums for fast action

A 10 % deduction on fees is available for pre-registrations made before April 3.

On-Site Registration

On-Site Registration will be available May 9 - 08:00 - 17.00

and during conference hours May 10 and 11. The fee will be augmented by 10 % as compared with the normal fee.

Confirmation

All registrations received up to April 28 will be confirmed by mail. Hotel reservations will be confirmed separately after our receiving the reservation and our checking with the hotel.

Payments

After receiving your registration form SSI will invoice you for payment in advance of the conference. Payment instructions are given at that time.

Hotel rooms are paid by the guest.

Cancellations

All cancellations must be in writing. Cancellations received before April 25: 50 % of fee will be refunded. Cancellations after that: no refund can be made. Refunds will be processed and mailed after June 1 st, 1989.

Partial/Shared Registrations

There is no partial registration fee and credit cannot be given for late arrival or early termination of attendance. One registration cannot be shared by two persons.

Press Registration

Working press is welcome to attend the CASE89 conference. A press-room is going to be available for registered press. Please submit your credentials to CASE89 c/o SISU in advance or at the reception desk at conference time.

Addresses:

CASE89 - SSI
Box 399
S-101 25 Stockholm, Sweden
+46-8-24 85 55

CASE89 - SISU
Box 1250
S-164 28 Kista, Sweden
+46-8-752 16 00 (Tphn)
+46-8-752 68 00 (Fax)

CASE89

The first Nordic Conference on Advanced Systems Engineering
May 9 - 11, 1989
Electrum
Kista
Sweden

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Conference schedule
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CASE89

Box 1250, S-164 28 Kista, Sweden
Telephone +46-8-752 16 00
Telefax +46-8-752 68 00

CASE89 - General schedule - 890508

Use the opportunity - take the break with a cup of coffee visiting the exhibition.

May 9

09.00 - 10.00	Registration & Coffee
10.00	The CASE89 Conference opening session in the "Electrumsalen"
12.45 - 14.00	Lunch
15.30 - 16.00	Coffee
17.15B/17.30Y	Conference ends for the day
17.30 - 19.30	approx. Get-together
19.30 -	Bus departures for the hotels and Stockholm Central Station

10 maj

08.15	Bus departures from Sheraton hotel.
09.00	Conference start in the Electrumsalen.
10.15 - 10.45	Coffee
12.30 - 14.00	Lunch
15.15 - 15.45	Coffee
17.15	Conference ends for the day
18.00 approx.	Bus departure for the Conference Dinner
later	Bus shuttle to Sheraton hotel and Stockholm Central Station

11 maj

08.15	Bus departures from Sheraton hotel.
09.00	Conference start in the Electrumsalen.
10.15 - 10.45	Coffee
12.25 - 13.10	Lunch
14.05 - 14.30	Coffee
16.05	Conference closing in the Electrumsalen.
16.30	Bus departures for Arlanda Airport (20-25 min) and for Stockholm Central Station (20-35 min depending on traffic intensity).

Sweden along with Finland notes the highest per capita coffee consumption of the world.

CASE89 - Conference time schedule
89-05-08

DAY	SESS	START	END
1	A	10,30	11,30

On the future of modelling - why current CASE-tools insist on supporting 20 years old methods and techniques.

Authors

Colette Rolland, Univ de Paris, SPEAKER

DAY	SESS	START	END
1	B	11,45	12,25

Systems Developement: - Basic flaws in the current culture. - Ideas for rectifying some of the problems.

Authors

Michael A. Kingsbury, N. Staffs SPEAKER

DAY	SESS	START	END
1	B	12,25	12,45

The Mistakes - Where systems development does not support business goals.

Authors

Torsten Bergkvist, Televerket SPEAKER

DAY	SESS	START	END
1	B	14,00	14,45

Information Systems Development: A Frame of Reference and Classification.

Authors

Anders G. Nilsson, Institute V SPEAKER

DAY	SESS	START	END
1	B	14,45	15,30

Using PSL/PSA to Model Information System Planning for The United States Department of the Army Headquarters.

Authors

Paul D. McDaniel, U.S.Army SPEAKER

DAY	SESS	START	END
1	B	16,00	16,30

A CASE study in object-oriented knowledge-base design using the KIWI system.

Authors

Els Laenens, Phillips Int. BV SPEAKER

Dirk Vermelr, University of Antwerp SPEAKER

John Snijders, Phillips KIWIS team

Francois Staes, Phillips KIWIS team

DAY	SESS	START	END
1	B	16,30	17,15

A framwork for use and classification of CASE-tools in systems analysis and a strategy for implementation.

Authors

Jan Hernbäck, Hernbäck & Lindqvist SPEAKER

Ingemar Lindqvist, Hernbäck & SPEAKER

DAY	SESS	START	END
1	Y	11,45	12,30

The broad tool - Foundallon.

Authors

Espen Brodln, Arthur Andersen & Co SPEAKER

Björn Ivar Danielsen, Arthur SPEAKER

DAY	SESS	START	END
1	Y	14,00	14,45

Computer Aided Database Design.

Authors

Lore M. Kern-Bausch, GEMAP mbH

Karl Beck, GEMAP mbH

Korbinian Kern, GEMAP mbH

Bernd G. Wenzel, GEMAP mbH SPEAKER

DAY	SESS	START	END
1	Y	14,45	15,30

Information Systems Development Supporting Methodologies With Computerized Tools.

Authors

Bernt T. Boström, EPOC System AB SPEAKER

DAY	SESS	START	END
1	Y	16,00	16,45

SVEA - A user driven and data driven system development method.

Authors

Ing-Marie Stenström, IRM Consult AB SPEAKER

Eskil Swende, IRM Consult AB SPEAKER

DAY	SESS	START	END
1	Y	16,45	17,30

How to succeed with the CASE-tool "DEFT" on the Macintosh.

Authors

Christina Lagerkvist, AB SPEAKER

Ake Nyberg, Infotool SPEAKER

DAY SESS START END
2 A 09,15 10,15

On the future of CASE tools.

Authors

Franz van Assche, James Martin SPEAKER

DAY SESS START END
2 B 10,45 11,30

The relationship between models, methods and system development tools (1 e CASE tools and 4th GL).

Authors

Lillian Dahl, FörsvarsData SPEAKER
Rudi Olsson, Försvarsstaben SPEAKER

DAY SESS START END
2 B 11,30 12,00

On Posteriori Integration of Software Tools.

Authors

Dick Schefström, TeleLOGIC AB SPEAKER

DAY SESS START END
2 B 12,00 12,30

IB - The Information Bus: A Multilayered Object Oriented Interface Description of Information Bases for Remote Application.

Authors

Björn Skjellaug, Dep Information SPEAKER

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2 B 13,30 14,00

Loosely Integrated sets of CASE tools (based on experiences of building two loosely integrated CASE tool sets having advanced user

Authors

Karl Känsälä, VTT SPEAKER

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2 B 14,00 14,45

PCTE - Solving CASE Data Integration.

Authors

Kim Portman, Nokia Research Center
Karl Rossi, Nokia Research Center SPEAKER

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How to test and compare CASE tools.

Authors

Tapani Kinnula, SISU SPEAKER
Jalal Matini, SISU

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2 B 15,45 16,30

Modelling CASE environments in Systems Development.

Authors

Kalle Lyytinen, Univ. of Jyväskylä
Karl Smolander, Univ of Jyväskylä
Veli-Pekka Tahvanainen, Univ. of SPEAKER

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2 B 16,30 17,15

Modelling the Business System.

Authors

Paul Lindgreen, Copenhagen Busln. SPEAKER

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Lexivisual Interfaces - the New Look.

Anita Kollerbaur, Stockholms SPEAKER
Thomas Larnhed, Univers. of SPEAKER
Mikael Kindborg, Univ. of Stockholm SPEAKER

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A Generic Model for Dialog Specification.

Authors

Laurence Roullé, IRISA SPEAKER
Patrick Bosc, Campus un. de
Alain Chauffaut, Campus un de

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Use of structured system development methods and supporting CASE tools for specification of the human computer interface: What can and

Authors

Allstair Sutcliffe, City University SPEAKER

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FRAME - a concept for documentation at ABB Data.

Authors

Lars Hemlingstam, Kreativ SPEAKER

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Edtion of structured documents in an hypertext environment.

Authors

J.L. Vignaud, Cap Sogell Innovation SPEAKER
Christine Buors, Cap Gemini Sogell

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COMIC: A system for conceptual modelling and information construction.

Authors

Hannu Kangassalo, University of SPEAKER

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The RUBIS System.

Authors

Jean-Yves Lingat, Thomson SPEAKER
Colette Rolland, Univ de Paris, SPEAKER
C. Cauvel, Université Paris 1

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The Income approach for conceptual modelling and prototyping of information systems.

Authors

Andreas Oberwels, Universität
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T. Németh, Univ. Karlsruhe (TH)
Frank Schönthaler, Univ Karlsruhe SPEAKER
W. Stucky, Univ Karlsruhe (TH)

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Organisational Implications caused by the fourth generation environment.

Authors

Simon Holloway, DCE SPEAKER

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The good CASE: a result oriented life-cycle, proper methods and supporting tools.

Authors

Gunnar Nilsson, CAP GEMINI BRA AB SPEAKER

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How CASE-tools and methods relate to each other - experiences.

Authors

Göran Lustig, SPADAB SPEAKER

Sven Ersson, Spadab SPEAKER

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What makes CASE work?

Authors

Miles Welter, IBM Svenska AB SPEAKER

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IRM shall support corporate objectives and must set a framework for CASE-tools. The framework is exemplified by presentation of Vägverkets

Authors

Jaro Potucek, Vägverket SPEAKER

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IRMA- Information Resource Management Architecture; a data-driven method used in planning the overall system architecture.

Authors

Eskil Swende, IRM Consult AB SPEAKER

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Experiences from establishing a systems coordination function based on Information Resource Management principles within Phillips

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Örjan Grape, SAGUS AB SPEAKER

Fredrik Runnqvist, PEAB SPEAKER

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The role of knowledge based systems to enhance user participation in the systems development process.

Authors

Gian M. Medri, PK-Banken SPEAKER

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A knowledge-based support system for the reuse of structured specifications and designs of embedded computer systems.

Authors

Tuomas Ihme, VTT SPEAKER

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A Knowledge Based System for Requirements Capture and Analysis.

Authors

Peri Loucopoulos, UMIST SPEAKER

R.E.M. Champlon, UMIST

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An expert system for semantic and relational database design.

Authors

Mokrane Bouzeghoub, Univ.P.et SPEAKER

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A knowledge-based system for embedded computer analysis & design.

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Kari Hakkarainen, T.Res.Centre SPEAKER

Tuomas Ihme, VTT SPEAKER

Markku Olvo, Techn Research Centre

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ALGRES: An Advanced Database System for Complex Applications.

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Roberto Zicari, Politecnico di Milano SPEAKER

F. Cacace, Politecnico di Milano

S. Ceri, University of Modena

S. Crespi-Reghizzi, Politecnico di

G. Gottlob, Technical University

G. Lamperti, TXT S.p.A.

L. Lavazza, TXT S.p.A.

L. Tanca, Politecnico di Milano

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"Glueing CASE-Tools Together in a Heterogeneous CASE-Environment".

Günter R. Koch, 2l Ind. Inform. GmbH SPEAKER

Petra Luchner, 2l Ind. Informatik

Franz Engelmann, 2l Ind. Informatik

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Subhash Oberoi Televerket Nätavdel-
ningen
Sigyn Ohlsson SJ-Data
Eva Olsson PhilipsElektronikindu-
strier AB
Ingela Olsson INFOLOGICS AB
Inger Olsson ADB-kontoret i Göte-
borg
Jonas Olsson SISU
Ingemar Pernevik Volvo Lastvagnar
AB
Leif Petersson Decerno Ab
Lars Qvarfort Televerket Nätavdel-
ningen
Olle Rahm Statskontoret
Karin Randerz Stockholms Universi-
tet
Birger Rapp Universitetet i Linkö-
ping
Ann Rehbinder Tekniska Högskolan
David Rolleberg Tekniska Högskolan
Bosse Rydh Tekniska Högskolan
Göran Rydmark Industri-Matematik
System AB
Gunnar Sandberg Kommundata AB
Karin Schilt WASALiv
G S Schouten Rijkswaterstaat
Kjell Schyberg Hewlett-Packard
Sverige AB
Armin Seidel NMP-CAD/Institutet
för Mikroelektronik
Norbert Shüller MIMER Software
AB
Malmcolm Sjödahl Programator
Stockholm AB
Fredrik Skogby Stockholms Options-
marknad OMFK AB
Bo Skogling Ericsson Programatic
AB
Birgitta Spiridon Philips Elektroniki-
ndustrier AB
Lena Stensjö Högskolan Falun/
Borlänge
Krystyna Strand Handelsbanken

Bo Svensson Spadab
Eva Söderlind Spadab
Torbjörn Söderlund Teleub Teknik
AB
Thomas Tenevall TeleLOGIC Sunds-
vall AB
Leo Tereväinen Datema System AB
Magnus Thall Televerket Nätavdel-
ningen
Vello Thomasson UDAC
Lars Thorsén ELLEMTEL Utveck-
lings AB
Eva Tilsjö Televerket Stockholm
Annica Viksten Telub Teknik AB
Nils G Virén ÅF-Mandator
Markku Väänen
Jan-Erik Wallin Ericsson Telecom
AB
Sven-Bertil Wallin AU-Gruppen AB
Lone WeimannJappe Sparekasser-
nes Datacenter
Rolf Welin SkandiaData
Göran Wendelius SAS Data
Roland Wikström Saab-Scania AB
Barbro Winstrand Vägverket
Lennart Wärn NobelDatSERVICE
Jianhua Yang Norges Tekniske
Högskole
Mingwei Yang Norges Tekniske
Högskole
Björn Ånstrand Software AG Sverige
AB
Inga Åsberg Statskontoret
Leif Ödmark ELLEMTEL Utveck-
lings AB

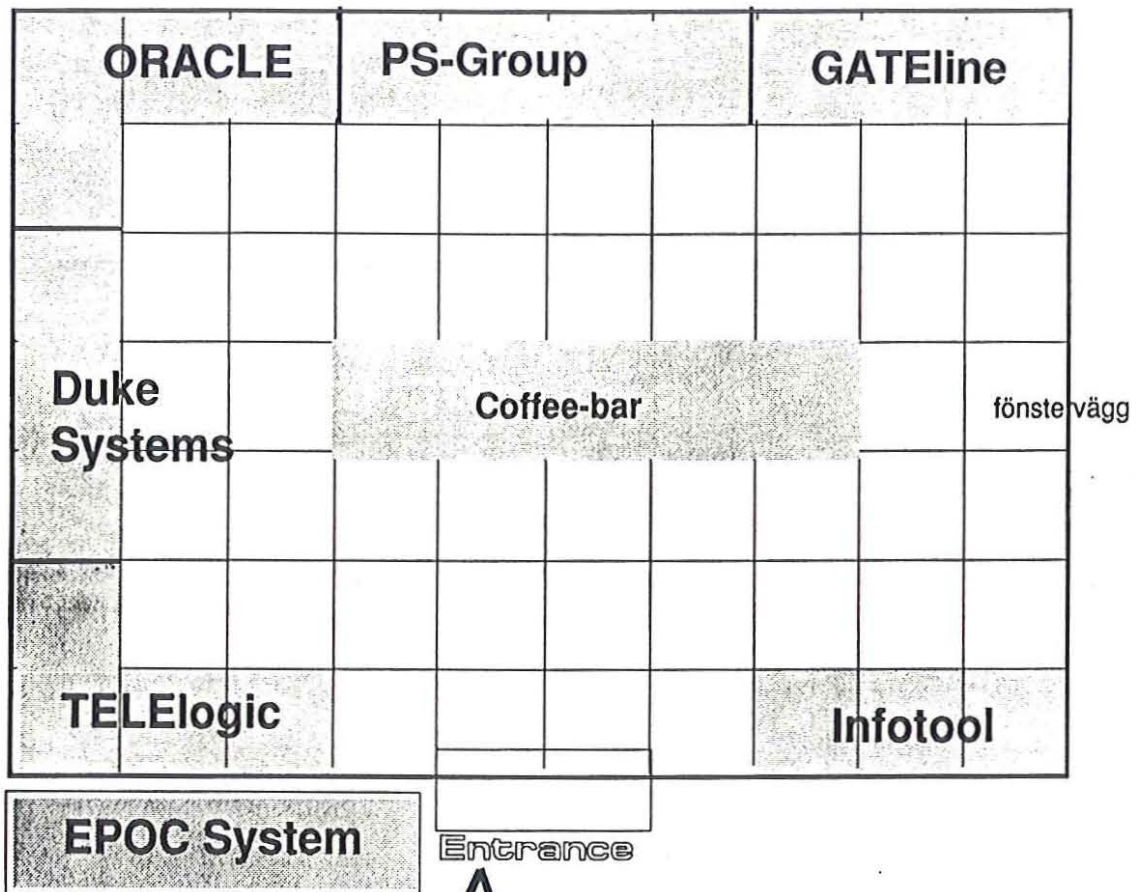
Miniguide to the exhibition

CASE89

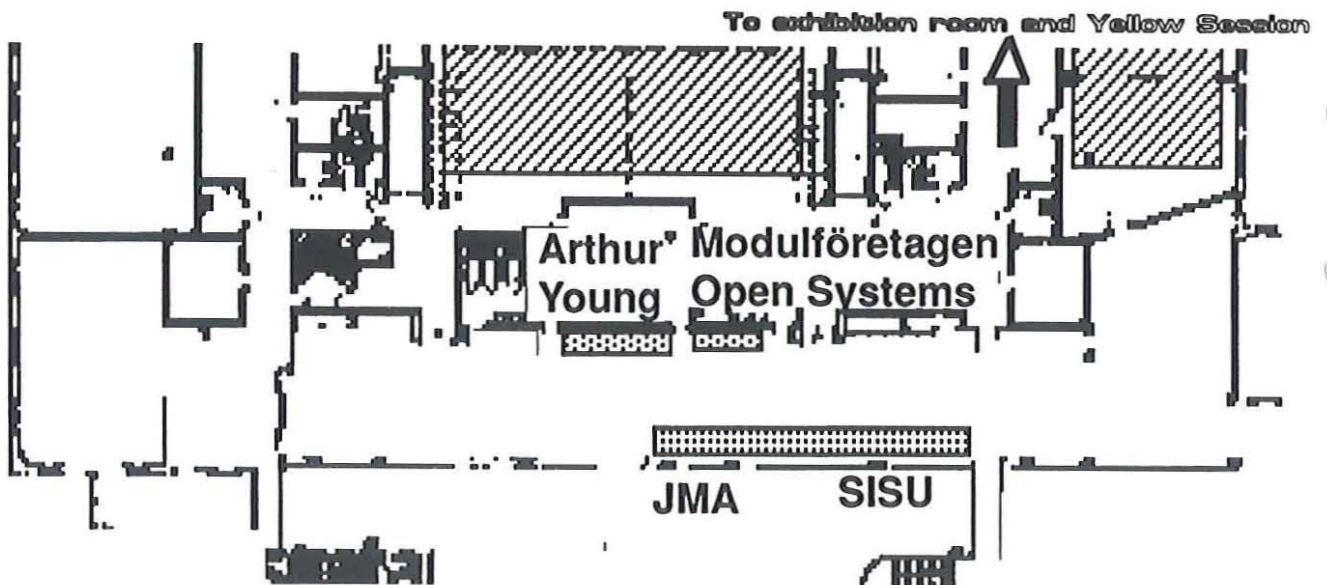
Electrum, Kista

May 9-11, 1989

Arthur Young AB
Duke Systems AB
EPOC System AB
GATEline AB
INFOtool AB
James Martin Associates
Modulföretagen Open Systems AB
ORACLE AB
PS-Group AB
SISU
TELElogic Sundsvall AB



CASE89 - DEMO/exhibition plan 3 - by the "Yellow Session Room"



CASE89 - DEMO/exhibition - plan 3 - the balcony

Utställare: Arthur Young AB Box 3143 Luntmakargatan 46 103 62 Sthlm 08 - 796 33 51 Anders Norén, Peter Ehn, Christer Lindberg	Användningsområden för verktyg								
	Prototyp.		Analys Verksamhet Information		Design Logisk Fysisk		Implementering Kodn. gener. Test		Förvaltning Drift Underh. Vidareutv.
Metoder som stöds SISP BSP LOGIC-METODEN INFORMATION ENGINEER VALFRI METODIK									
Verktyg: IEW / PWS IEW / AWS IEW / DWS IEW / CWS IEW / GAMMA									
Maskinvara som krävs: 1. IBM PC/AT, eller kompatibler 2. IBM 370-arkitektur under MVS	Installationer: I Sverige 300 Övr. Norden 300 Utom Nord. 14.000	Kommentar i övr från lev: Vi lanserar IEW / CWS, Construction Workstation, vilket ger en helt PC-baserad applikationsgenerator för de största IBM-miljöerna, IMS/CICS, DL/1, DB2, COBOL, COBOL II.							

Utställare: Duke Systems AB Box 2056 127 02 Skärholmen 08-978383 Staffan Enhörning	Användningsområden för verktyg								
	Prototyp.		Analys Verksamhet Information		Design Logisk Fysisk		Implementering Kodn. gener. Test		Förvaltning Drift Underh. Vidareutv.
Metoder som stöds 4 Dimensional Cognitive Modelling									
Verktyg: MetaVision Business Modelling Software Engineering Prototyping									
Maskinvara som krävs: PC 640 k	Installationer: I Sverige 0 Övr. Norden 0 Utom Nord. ? new	Kommentar i övr från lev: Kunden kan använda sin egen utvecklingsmetod. Program som genereras: CICS Cobol.							

Utställare:		Användningsområden för verktyg							
EPOC SYSTEM AB Box 9105 126 09 Stockholm 08 - 744 34 50 Berni T. Boström		Prototyp.							
		Analys		Design		Implementering		Förvaltning	
		Verksamhet	Information	Logisk	Fysisk	Kodn. gener.	Test	Drift	Underh. Vidareutv.
Metoder som stöds									
Datamodellering									
Verktyg:									
MODELLATOR									
Metoder som stöds									
Rutinflöden (RUTH)									
Dialogflöden (RUTH)									
Verktyg:									
RUTH									
Metoder som stöds (**)									
Funktionsanalys med V-grafer och I-grafer									
Verktyg:									
GRAPHDOC									
Maskinvara som krävs:		Installationer:		Kommentar i övr från lev:				(**)GRAPHDOC: Stödjer de tidiga faserna av ISAC. Har lättläst metodlitteratur för funktionsanalys: "Systemering med datorstöd", Boström m fl, Esselte Studium. Datorstödet bygger på ett funktionsorienterat synsätt med verksamheter /processer, mängder och flöden.	
Standard PC med 640 k. Olika typer av grafik kan användas. DOS 2.0 eller högre.		MODELLATOR: I Sverige 5, Övr. Norden 60, Utom Nord. /. RUTH: I Sverige 60, Övr. Norden 10. Utom Nord. /. GRAPHDOC: I Sverige 50 Övr. Norden 20. Utom Nord. 130.		MODELLATOR: (*) Automatisk övergång III/IV, SQL och Dataflex. Datorstödet bygger på ett objekt-orienterat synsätt med entiteter-relationer-attribut. RUTH: Metoden stödjer arbetet med att analysera ärenden och utforma rutiner. Datorstödet bygger på ett händelseorienterat synsätt och omfattar även dialogflöden.					

Utställare:		Användningsområden för verktyg							
GATE IIte AB Box 590 146 00 Tullinge 08 - 778 44 40 Matti Andersson		Prototyp.							
		Analys		Design		Implementering		Förvaltning	
		Verksamhet	Information	Logisk	Fysisk	Kodn. gener.	Test	Drift	Underh. Vidareutv.
Metoder som stöds									
DeMarco/Yourdon SA									
Ward & Mellor SA/RT									
Chen IM									
Bachman IM									
Verktyg:									
PROSA									
PROSASQL									
Maskinvara som krävs:		Installationer:		Kommentar i övr från lev:				Fully integrated support for SA/RT/IM, advanced user interface, fully automatic balancing, multiuser suport, standard platforms, open architecture, high quality documents, advanced SQL generation with abstract storage types.	
IBM PC/AT, PS2 VAXSTATION 2000/2 SUN 3 APOLLO 3-4000		I Sverige 20 Övr. Norden 250 Utom Nord. 120							

Utställare:		<u>Användningsområden för verktyg</u>							
Infotool Box 101 182 12 Danderyd 08 - 753 49 68 Åke Nyberg		Analys		Design		Implementering		Förvaltning	
		Verksamhet	Information	Logisk	Fysisk	Kodn. generer.	Test	Drift	Underh. Vidareutv.
Metoder som stöds									
Vanligt förekommande						Från 88Q4			
Verktyg:									
DEFT						Från 88Q4			
Maskinvara som krävs:		Installationer:		Kommentar i övr från lev:					
Macintosh		I Sverige 100							
		Övr. Norden 50							
		Utom Nord. 1000							

Utställare:		<u>Användningsområden för verktyg</u>							
JMA, James Martin Associates James Martin House Littleton Road, Ashford Middlesex TW 15 1T2 Mike Shanahan, 0784-245058		Analys		Design		Implementering		Förvaltning	
		Verksamhet	Information	Logisk	Fysisk	Kodn. generer.	Test	Drift	Underh. Vidareutv.
Metoder som stöds									
Information Engineering									
enl. James Martin									
Verktyg:									
IEF Planning Toolset									
IEF Analysis Toolset									
IEF Design Toolset									
IEF Database Gener. Tool									
IEF Code General. Tool S.									
Maskinvara som krävs:		Installationer:		Kommentar från lev:					
PC AT or PS/2, IBM,MVS/XA DB2,CICS or IMS/DC, Cobol II		I Sverige 2 st		We are opening a JMA Nordic AB company in Stockholm in late May '89. Support for IE and IEF will be available in Swedish through our co-operation agreement with Volvo Data.					
		Övr. Norden 6 st							
		Utom Nord.150 st							

Utställare:	<u>Användningsområden för verktyg</u>							
	Analys		Design		Implementering		Förvaltning	
Modulföretagen Open Systems AB Parkvägen 2 a 171 38 Solna 08- 734 98 80 Carl Kindstrand	Verksamhet	Information	Logisk	Fysisk	Kodn. gener.	Test	Drift	Underh. Vidareutv.
	Metoder som stöds	Prototyp.						
De Marco / Yourdon								
Gane / Sarson								
Jackson								
Chen								
Constantine/Yourdon								
Halley/Pirbhai								
Verktyg:								
Software through Picture								
Maskinvara som krävs:	Installationer:	Kommentar i övr från lev:						
Arbetsstationer: Vaxstation SUN Apollo HP	I Sverige 0 Övr. Norden 10 Utom Nord. 1000	Produkten introducerades i april 1989 i Sverige. Modulföretagen är distributör i Sverige. Produkten utvecklas av IDE (Interactive Development Environments). Företagets grundare är Anthony Wasserman.						

Utställare:	<u>Användningsområden för verktyg</u>							
	Analys		Design		Implementering		Förvaltning	
ORACLE AB Box 1215 164 28 Kista 08 - 703 24 00	Verksamhet	Information	Logisk	Fysisk	Kodn. gener.	Test	Drift	Underh. Vidareutv.
	Metoder som stöds	Prototyp.						
Metodoberoende								
Verktyg:								
CASE*Dictionary								
CASE* Designer								
SQL*FORMS								
Maskinvara som krävs:	Installationer:	Kommentar i övr från lev:						
CASE*Designer: SUN 3, HP Workstation eller VAX Workstation. Övriga verktyg går på de flesta datorer/op.system.	I Sverige - Övr. Norden - Utom Nord. -							

Utställare:	<u>Användningsområden för verktyg</u>							
	Analys		Design		Implementering		Förvaltning	
PS-Group AB Box 4537 Djupdalsvägen 17-19 191 04 Sollentuna 08 - 92 88 60 Gustaf Blixen	Verksamhet	Information	Logisk	Fysisk	Kodn. gener.	Test	Drift	Underh. Vidareutv.
Metoder som stöds	REFLEX (Programator)							
Verktyg:	PRISM							
	EXCELERATOR							
Maskinvara som krävs:	Installationer:		Kommentar i övr från lev:					
PC - 640 KB, 10 MB DISK, EGA, MOUSE VAX SUN (UNIX) APOLLO (UNIX)	I Sverige 40 Övr. Norden 200 Utom Nord. 15000		Vi kommer också att visa den anpassade versionen av EXCELERATOR för Programators systemutvecklingsmetod REFLEX (tid. SAK/MBI) med egna symboler, ritteknik och svensk översättning.					

Utställare:	<u>Användningsområden för verktyg</u>							
	Analys		Design		Implementering		Förvaltning	
SISU, Svenska Institutet för Systemutveckling Norra Krokslättsg. 2 412 64 Göteborg 031 - 83 02 50 Lars-Åke Johansson Mats R Gustafsson	Verksamhet	Information	Logisk	Fysisk	Kodn. gener.	Test	Drift	Underh. Vidareutv.
Metoder som stöds	DFD/DM en/ AU-modellen							
	Applikationsmodellering							
	CMOL/SIMOL							
	MBL (tidigare version)							
	RASP (tidigare version)							
	Databasdesign - relat.mod							
Verktyg:	RAMATIC							
Maskinvara som krävs:	Installationer:		Kommentar i övr från lev:					
Sun 2 o 3, SunUNIX IBM RT PC, AIX Inom kort: Micro VAXII, Ultrix VAX Station 2000, Ultrix och VMS	I Sverige 10 st Övr. Norden 1 st Utom Nord. st		RAMATIC är ett <u>generellt</u> modelleringsstöd - grundutformning och funktioner är oberoende av systemutvecklingsmodell, beskrivningsteknik och modelleringspråk. Olika beskrivningsmetoder och tekniker kan definieras ovanpå RAMATIC:s grundfunktioner genom ett speciellt anpassningspråk. Exempel på utförda anpassningar anges under stödda metoder ovan.					

Utställare:

TeleLOGIC Sundsvall AB
 Box 833
 851 24 Sundsvall
 Sune Sundell
 060-16 14 00

Användningsområden för verktyg

Prototyp.

Analys

Verksamhet
 Information

Design

Logisk
 Fysisk

Implementering

Kodn. gener.
 Test

Förvaltning

Drift
 Underh. Vidare-utv.

Metoder som stöds

Verktyg:

Base / OPEN

Maskinvara som krävs:

Installationer:
 I Sverige
 Övr. Norden
 Utom Nord.

Kommentar i övr från lev:

PREFACE

The lead time from research results in the area of information systems engineering to broad exploitation and use of the results in business and industry is often more than 15 years. This is manifested by, for instance, relational data base theories, semantic data modeling approaches, and first steps towards tools which today are known as CASE, which all were introduced in the early seventies. Except for impressive graphics interfaces there is, from a methodological point of view, very little new in today's commercial products and services.

In order to improve their competitiveness, organizations feel a great need to develop their information processing and management strategy for the nineties or even the 2000. Development of such a strategy, of course, needs good predictions about the information technology available in the future and ways to introduce new technology in conservative organizations. In order to make such predictions, deep insights on current use of IT and current results as well as trends in IT research are mandatory. Skills in "strategy making" alone are not sufficient.

One objective of CASE89 is to contribute to a deeper insight in this respect by exposing current scientific research of high quality as well as by reporting on experiences and ideas from advanced applications in business and industry. Another objective is to contribute to a much improved communication between the research and the business and industry communities. The third objective is to stimulate increased participation by the Nordic countries in international research programmes, such as ESPRIT. The CASE89 conference programme looks very promising and encouraging in all these respects. It is probably one of the few conferences held, where a true balance seems to exist between scientific contributions and contributions from business, industry and administration.

CASE89 is also the first truly international conference on information systems engineering held in Sweden. It has been made possible thanks to all persons, world wide, who have supported it by contributing many interesting and high quality papers. Credit must also be given to our Nordic colleagues who have devoted much of their time on reviewing. The staffs of SSI and SISU have with great energy contributed in technical as well as in administrative matters.

A special acknowledgement and thanks should be given the program chairman Dr. Björn Nilsson, the organization chairman Lars Bergman, Marianne Sindler, and Eva Lindberg for taking the main work-load starting from Call for Papers to actually running this conference.

Agneta Qwerin
Swedish Society for
Information Processing

Janis Bubenko jr
Swedish Institute for
Systems Development

General conference chairpersons

Some words from the CASE89 Program Committee Chairman

The role of CASE 89 is to act as a catalyst in the interaction between research and industry in matters concerning software engineering. In practice, this is done in three ways. The first is to expose contemporary scientific research and thinking to the business and industry and to explore possible implications thereof. The second is to report actual business and industry experience of methods and products and to expose problems, such as the absence of methods for relevant classes of problems, thereby stimulating the migration of research into even more useful areas. The third is to present actual methods and products and expose experiences thereof.

The role of the program committee for CASE 89 is to find a proper balance where contributions from different parties can best fertilize one another. At the same time, as some papers are conventional scientific contributions, normal reviewing standards have been applied. To sum it up, the difference from normal procedure is that each paper has been reviewed as being either a scientific contribution, a report/evaluation from the practitioner, a methods presentation or a product presentation.

In some cases, this has led to situations where a paper, regarded as a scientific contribution, has been rejected but, regarded as a methods or product presentation, has been accepted with flying colors. In other cases, papers possibly meant to be experience reports or methods presentations has met the more stringent demands of a scientific contribution.

On behalf of the executive program committee, I would like to thank all the reviewers who performed the actual evaluation of the papers in so many dimensions without complaints, thereby making an uncommonly interesting mixture of presentations possible.

Matts Ahlsén

Rudolf Andersen

Bertil Andersson

Elving Arnoldsson

Frode Aschim

Anders Björnerstedt

Håkan Dahl

Roland Dahl

Inge Dahlberg

Christer Dahlgren

Erik Frökjaer

Anders Fungdal

Kurt Gladh

Mats R Gustafsson

Lars Hellberg

Helge Holmén

Mats-Åke Hugoson

Christer Hultén

Mattias Hällström

Carl-Gustaf Jansson

Lars-Åke Johansson

Stig Johansson

Leif Jungstål

Hannu Kangassalo

Barbara Klockare

Erik Knudsen

Anita Kollerbaur

Magne Källström

Bo Lindahl

Eva Lindencrona

Paul Lindgreen

Jesper Lundh

Bengt Lundberg

Ove Lundvall

Kalle Lyytinen

Gunnar Nilsson

Björn Norén

Moira Norrie

Örjan Odelhög

Lars Olsson

Peter Rosengren

Gunnar Sandberg

Lars Swärd

Lars Söderlund

Arne Sölvberg

Per Tidén

Benkt Wangler

Hans Willars

Ulf Åsén

Björn Nilsson

SISU

Swedish Institute for Systems Development

The Swedish Institute for Systems Development (SISU), established 1985, is a non-profit organisation conducting advanced research in the area of information systems development. It is jointly supported by the National Swedish Board for Technical Development (STU), and by the Association of Supporters of Information Systems Development in Sweden (ISVI). There are currently 36 members of ISVI, who represent government agencies, public and private industries, specifically the computing industry, and banking and insurance. SISU employs 30 researchers and has a turn-over of 6 million US\$ per year.

Swedish Institute for Systems Development

Box 1250, S-164 28 Kista, Sweden

Phone: 46-8-752 16 00

Fax: +46-8-752 68 00

AIMS AND SCOPE

The purpose of SISU is to act as a bridge between research in information technology and the Swedish industry, business, and public administration. The goal of SISU is the development of knowledge and competence in the area of information systems development, and to promote its transfer to the supporting organisations. SISU's research focuses on advanced methods and tools to improve the design and to facilitate the use of next generation, data-intensive information systems. A major activity is to transfer research findings to the practical plane in close cooperation with the supporting organisations. SISU personnel is also actively engaged in educational programs at the Royal Institute of Technology and at the University of Stockholm.

ORGANISATION

SISU is organised in four departments

- Information and knowledge transfer
- Methods for information system modeling
- Computer Aided Information Systems Engineering
- Knowledge Based Systems

Projects (see below) are normally run in cooperation with industry and staffed by persons from more than one department.

MAIN PROJECTS AND ACTIVITIES

The research directions of SISU are determined by three-year programs, established by STU and ISVI. Currently, the main activities and projects are:

- **INFORMATION:** A monthly newsletter *SISU Informa* is distributed to all interested individuals of the ISVI. The current circulation is more than 600. The magazine *SISU Analys* provides entry to important new information technology areas by presenting surveys, practical experiences, research directions, and available literature. Both publications are in Swedish. General results and findings of SISU project activities are published in a *SISU Report* series.
 - **EDUCATION:** SISU provides education primarily to its supporting organisations. Introductory as well as advanced courses on topics such as *Conceptual Modeling, Systems Development Methodologies, Data Base Technology, Data Base Modeling and Design, Computer-Aided Systems Development, Distributed Databases, Office Information System Technology, Artificial Intelligence, Logic Programming, Knowledge Engineering, and Expert Systems* have been presented. Numerous conferences, seminars, and tutorials have been held featuring internationally well known experts. The next major event is CASE89 - an international Conference on Advanced Systems Engineering, to be held May 9-11, 1989 in Stockholm.
-

- **METHOD DEVELOPMENT AND SUPPORT:** An integrated, coherent framework and (object oriented) methodology for information systems development is being developed in cooperation with member organizations. The methodology will employ a high level conceptual modeling and system specification language. SISU personnel is also engaged in projects, run jointly with a number of supporting organisations, where the organisations' current methods are further developed, refined and adapted for computer support using the RAMATIC tool (see below).
- **RAMATIC:** a prototype of a generic, graphics-oriented model management tool ("CASE shell") is under development at SISU Göteborg. The tool permits a designer to define his own design methodology (in terms of types of design objects), and a graphical as well as a formal specification language. The tool will then employ the method definition to maintain a design- and specification data base. The current version of the tool is in experimental and/or production use at several supporting organisations. Versions of RAMATIC are currently available for SUN/Unix, IBM PC/RT (AIX), VAX (Ultrix), and VAX (VMS).
- **AVANCE:** a prototype environment for development and implementation of distributed, interactive information systems is being implemented on SUN/Unix. It is based on the principles of object oriented programming. Plans exist to further develop the prototype, and to integrate it in an object oriented systems development methodology (see above), which will focus on decentralization, loosely coupled systems, and reuse and sharing of information- and software resources.
- **CASE-LAB** is the name of a set of related projects, run jointly with industrial partners. All have the common goal to promote knowledge and competence in the CASE-area. This is achieved by activities which focus on systematic assessment of tools, systematic experiments with existing commercial tools as well as with research prototypes, and experimental development of CASE tools (using CASE shells) for a number of novel methodologies. An important aspect of CASE-LAB is exchange of knowledge and experience among industrial partners.
- **VDDS/RAMATIC** is a joint project run by Volvo Car, Data-Logic, Digital, and SISU. It aims at developing an integrated, computer-based, support environment for Volvo Car's system development methodology, using the RAMATIC CASE-shell. Computer support for parts of the methodology is already in operation at Volvo.

MAIN PROJECTS AND ACTIVITIES

- **TRIAD:** Initiated by the Swedish Telecom and SISU, this joint project focuses on information resource management in heterogeneous database environments. The project includes a number of activities on topics such as methods and tools for conceptual modeling, data dictionaries, distributed databases and query processing, and knowledge based techniques for information management.
- **HSQL** is a project aiming at a prototype to interface SQL-databases in natural language and graphics. The interaction will be supported by a knowledge-base. HSQL is run jointly by a number of Nordic industry and research partners.
- **ESPRIT PARTICIPATION:** SISU participates in the ESPRIT 2 projects P2469 TEMPORA (Integrating Database Technology, Rule-Based Systems and Temporal Reasoning for Effective Software), and in P2424 KIWIS (Advanced Knowledge-Base Environments for Large Database Systems).

In addition to the above activities, a number of smaller joint projects are carried out in cooperation with the supporting organizations. These projects concern topics, such as, *Data Administration, Reference Models for Information Resources Management, Dialog Modeling, Specification Quality Assurance, Office Case Management, and Strategies for Information Processing in the nineties.*

Commissioned projects are carried out in areas such as education and training, methods development support, conceptual modeling, information management, development of natural language interfaces to databases, and development of expert systems.

SUPPORTING ORGANISATIONS

The following organisations are members of ISVI:

ARTHUR YOUNG AB • ABB DATA AB • AU-GRUPPEN • DATA LOGIC • DIGITAL EQUIPMENT • ENEA • ERICSSON • FRI • FÖRSVARSTABEN • IBM • INFOLOGICS • IRM-CONSULT • KOMMUNDATA • MANDATOR AB • MIMMER SOFTWARE AB • PHILIPS ELEKTRONIK AB • PROGRAMATOR • POSTEN • RIKSSKATTEVERKET • SAAB-SCANIA • SAS DATA • SEBANKEN • SKANDIA • SKF • SÖDRA SKOGSÄGARNA • SPADAB • STATSKONSULT • STATSKONTORET • TELEVERKET/P • TELEVERKET DATA SERVICES • TELUB TEKNIK AB • UNISYS • VATTENFALL • VOLVO-DATA • VOLVO LASTVAGNAR • VOLVO PERSONVAGNAR

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Phone: +46-31-830250, Fax +46-31-831047.