

# **International Society for Business and Industrial Statistics (ISBIS): The evolution of business and industrial statistics in the International Statistical Institute**

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**KEYWORDS** (5 – 10 key words) ASMBI, ISBIS, ISI Association, SBI Committee,  $\gamma$ -BIS

## **ABSTRACT 150 – 200 words**

For more than three decades, the International Statistical Institute has been actively promoting Business and Industrial Statistics, initially through its Committee structure (Committee for Statistics in Industry, which evolved into the Statistics in Business and Industry Committee) and then, since 2007, as one of its Associations, the International Society for Business and Industrial Statistics (ISBIS). This article surveys this history and the evolution of its products and services, most notably the ISBIS journal *Applied Stochastic Models in Business and Industry* (ASMBI), and  $\gamma$ -BIS, the young statisticians' component of ISBIS.

## 1. Beginnings

The origins of the International Statistical Institute (ISI) extend well back into the 19<sup>th</sup> Century.

Two national statistical societies had started up earlier, the [Royal Statistical Society](#) in 1834 and the [American Statistical Association](#) in 1839. The ISI itself grew out of a series of meetings, with its formal founding occurring in 1885.

Special Interest groups, termed Sections, started to crystallize in the ISI in 1947 with the formation of the [International Association for Statistics in the Physical Sciences](#) (which later became the Bernoulli Society in 1975), and some other Sections (now called Associations) followed in short order. Like the ISI itself, each of these emerged from a series of meetings of statisticians with common interests, of which the [International Society for Business and Industrial Statistics](#) (ISBIS) is a prime exemplar.

Encouragement for the ISI to take an interest in business and industrial statistics can be traced back to a letter<sup>[A1]</sup> dated 8 August 1989 from Lai K. Chen, Professor and Chair of the Department of Statistics at the University of Manitoba to the retiring ISI President, Ivan Fellegi. It began:

I believe that the International Statistical Institute is in a good position to become an international leader in the promotion and training of statistical methods for quality and productivity improvement.

The ISI responded swiftly. An Open Meeting was arranged at short notice for the 1989 ISI Session in Paris

... to consider mechanisms for playing an active role in the development of statistical practice in industry. The discussion was led by Jon Kettenring and Gunnar Kulldorff. A list of all attendees is attached.

...

The discussion closed with general agreement that (a) an ad hoc committee should be established to pursue these matters, (b) there is a need to increase industrial membership in ISI, (c) a satellite meeting on Statistics in Industry should be held in conjunction with the next ISI Session; and (d) we should collaborate as appropriate with other interested organizations. These suggestions were passed on to President Kulldorff for further attention<sup>[A2]</sup>.

The ISI's Executive Committee proceeded to act on these conclusions. A number of the participants in the Open Meeting were invited by Gunnar Kulldorff to form a working group on Statistics in Industry (subsequently termed the Committee on Statistics in Industry, CSI), as detailed in a letter<sup>[A3]</sup> from the then Director of the Permanent Office Denise Lievesley dated 22 June 1990:

... At the open meeting it was suggested that an ad hoc Committee should be established on the topic of statistics in industry and that a satellite meeting to the Cairo Session on the topic might be arranged. Draft terms of reference for the ad hoc Committee had been prepared and the proposal for such a committee was brought to the ISI Council in Paris. However they were reluctant to establish a committee at that stage - not because of any disagreement with the specific proposal but because they wanted first of all to review the general principles of establishing committees.

At a recent meeting in the Hague the Executive Committee reconfirmed its wish to proceed in this area and hence decided to establish the working party of five people [Jeff Wu, Vijayan Nair, Nick Fisher, Lai K. Chan under the Chairmanship of Ram Gnanadesikan] to develop ideas for both the short and long term role of the ISI in the field of statistics in industry and to address the status of a committee and the relationship of a committee on this topic with the ISI Research Centre ...

This led to the ISI Executive formally establishing a Standing Committee<sup>[A4]</sup> in March 1992.

## **2. Committees on Statistics in Industry, and Statistics in Business and Industry (SBI)**

### *2.1 Establishment of CSI and SBI and their Activities*

Ram Gnanadesikan (1992–1995) and Vijay Nair (1995–1999) served as the Chairs of CSI. In 1999, the scope of CSI was broadened to include business statistics and the name was changed to Statistics in Business and Industry (SBI). Nick Fisher (1999–2003) and Bovas Abraham (2003–2005) served as committee chairs. The purpose of SBI was

To support the work of statisticians working in business and industry by monitoring their needs on an ongoing basis, promoting research and applications and best current practices, facilitating technology transfer, and fostering communication among members. The SBI Committee seeks to promote (both to statisticians and to

industry) the value and importance of Statistics in Business and Industry, and to support suitable activities, particularly in lesser-developed countries.

with a vision that

SBI [be] recognised as a significant force for promoting (both to statisticians and to industry) the value and importance of Statistics in Business and Industry, and for supporting suitable activities, particularly in lesser-developed countries.

Numerous activities ensued, as summarized in the Appendix<sup>[A4]</sup>, and also in a series<sup>[A5]</sup> of annual reports to the ISI Executive for CSI and its successor, the Statistics in Business and Industry (SBI) Committee.

One interesting and subsequently important outcome of SBI's activities occurred during the Linköping conference in 1999. A number of the European delegates met informally, to discuss ways to facilitate "connecting individuals and organisations, interested in theoretical developments and practical applications in the field of business and industrial statistics". This led to the formation of the European Network for Business and Industrial Statistics ([ENBIS](#)) from which the quote is extracted. ENBIS was formally founded in 2000, and has been flourishing ever since. Many ISBIS members are members of both organizations and a fruitful cooperation between the two organisations has been established since then.

## *2.2 Preparations to Become an ISI Section*

During 2003 – 2005, the SBI committee<sup>1</sup> prepared the application for Section status in the ISI. The then Chair ISI's Environmental Statistics committee, Jef Teugel had kindly provided the draft Statutes he had developed for that committee's application to form a Section<sup>2</sup>. These draft Statutes required relatively little change for our purposes. Bovas Abraham coordinated the

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1 The SBI Committee comprised Bovas Abraham, Ronald Does, Luis Escobar, Osvaldo Ferreiro, Nick Fisher, Yves Grize, Chihiro Hirotsu, Carlo Lauro, Fred Lombard, William Meeker, Vijay Nair, Sunghyun Park, David Steinberg and Jeff Wu.  
2 TIES – [The International Environmetrics Society](#).

finalisation of the business case, statutes and other elements required for the submission. The ISI conferred Section status on the new International Society for Business and Industrial Statistics (ISBIS) at its Session in Sydney in April 2005. The initial Executive and Council Members are provided in the Appendix<sup>[A6]</sup>.

### **3. International Society for Business and Industrial Statistics (ISBIS)**

#### *3.1 Getting Started as a Professional Society*

Initial activities focused on setting up the basics. A Satellite meeting had already been planned at Palm Cove, North Queensland, Australia, which was ISBIS's first international conference.

Possibilities for further conferences, workshops and short courses were explored. A basic web site was established. Various immediate initiatives for defining membership categories and attracting individual, student and institutional members were deployed. Work continued on securing a journal for the Society (see §3.2). and the society prepared itself to hold its first elections.

The first elected representatives for ISBIS took office in 2007<sup>[A6]</sup>. An important task for this group was to formalize a number of elements critical to the future health of the new society. A 4-year Strategic Plan was developed that provide a template for activities over the next few years<sup>[A7]</sup>.

These are discussed separately below.

#### *3.2 Applied Stochastic Models in Business and Industry – ASMBI*

According to the Scimago Journal and Country Rank [website](#),

ASMBI - Applied Stochastic Models in Business and Industry (formerly Applied Stochastic Models and Data Analysis) was first published in 1985 [by John Wiley & Sons], publishing contributions in the interface between stochastic modelling, data analysis and their applications in business, finance, insurance, management and production.

The SBI Committee had had numerous interactions with the then Editor-in-Chief, Jef Teugels<sup>3</sup>, resulting in a series of Special Issues of ASMBI based on peer-reviewed proceedings of SBI conferences with SBI-appointed Guest Editors. The first of these was based on presentations to the ISIS-2 conference.

It is appropriate to interpolate here the fact that in the course of these negotiations, Wiley had become an important supporter of SBI and subsequently ISBIS activities, most notably conferences.

After protracted negotiations, ASMBI became the official journal of ISBIS in August 2007.

A new Editorial Board was appointed, consisting of an Editor-in-Chief (Fabrizio Ruggeri), two Editors (Nalini Ravishanker and Dennis Lin) and some thirty Associate Editors (AEs). One of the two Editors is generally responsible for submissions relating to Business (Ravishanker, succeeded by Kathy Ensor, and currently Rituparna Sen) and the other (Lin, then Emmanuel Yashchin) for submissions relating to Industry. The list of AEs is refreshed with a small number of changes each year. The Editorial Board has been characterized by a very broad geographical representation and diversity, with a significant number of AEs coming from companies.

ASMBI has, on the one hand, a life of its own but, on the other hand, plays a very active role within ISBIS. Thus, ASMBI arranges discussion paper sessions at each biennial ISBIS international conference and at the ISI World Statistics Congress. ASMBI also publishes special issues deriving from the proceedings of ISBIS international conferences and regional meetings (*e.g.* India). ASMBI also cooperates with other societies, for example, by publishing special issues deriving from ENBIS Spring meetings.

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<sup>3</sup> The previous Editor-in-Chief, Jef Teugels, had worked very hard to raise the scholarly level of ASMBI to the point at which it was a respected scientific journal by the time that it became the official ISBIS journal.

ASMBI's basic editorial approach can be summarized by the following statement:

“ASMBI is interested in papers presenting innovative methodologies in stochastic modelling, good mathematics and sound (or a potential for sound) applications in Business and Industry”.

Whilst enforcement of this policy has led to many rejections, it has also resulted in important recognition by the statistical community in general. ASMBI is always seeking discussion papers and special issues on hot topics, and these have been attracting significant attention. Further, ASMBI is eager to evolve, both in response to its role within ISBIS and to stay abreast of scientific developments, all the while maintaining a rigorous policy about the quality of what it publishes. Thus, most recently, ASMBI has launched the Practitioner's Corner which aims to present modern statistical methods in a form that is accessible to people not in the academic world; and a new section on Data Science in Business and Industry has been launched, in response to the new demands by a community larger than the statistical one. This will be the legacy left to the new Editor-in-Chief, who will take over on January 1, 2024.

### *3.3 ISBIS News*

In February 2008, an ad hoc committee was formed to develop the format and content of a newsletter, ISBIS News. After technical support through the University of Michigan was secured, Werner G. Mueller from the Johannes Kepler University in Linz, Austria agreed to become the founding Editor in September of the same year.

Many of the early features of the newsletter such as the characteristic 3-column layout and an initial table of contents were suggested by Nick Fisher. David Steinberg, Dennis Lin and Yves-Laurent Grize were helpful in the Newsletter's initiation and the first issue finally appeared in November 2008 with Fabrizio Ruggeri and Vincenzo Esposito Vinzi as Contributing Editors. Ruggeri, then editor of the ISBIS official scientific journal *Applied Stochastic Models in Business and*

Industry (ASMBI), started his column “What’s new in ASMBI?”, briefly informing the ISBIS members of recent publications or forthcoming papers in the journal. It remains a central element of ISBIS News to this day. In addition to this column, ISBIS News aimed to provide timely information about general ISBIS activities, upcoming conferences, ISBIS election information and member news as well as offering a forum for book reviews and alerts, software reviews and letters to the editor.

Initially planned to be bimonthly, the actual frequency of ISBIS News turned out to be 2 – 4 issues per year and is currently in its 15<sup>th</sup> year of publication. The editor has changed several times: N. Balakrishna (2011–2014), Román Viveros-Aguilera (2014–2021) and, most recently, Babak Zafari (2022–). Numerous contributing editors have added to the contents over the years, ensuring that it is a valuable source of information for all ISBIS members.

Lastly, from the onset, ISBIS News was also regarded as an important medium to communicate with young statisticians by means of a regular *y*-BIS column, *y*-BIS being one of ISBIS’s real success stories.

### 3.4 *y*-BIS

Planning for how to make membership of ISBIS an attractive proposition for young statisticians commenced at the ISBIS biennial meeting in Prague in 2008. An open invitation was extended to all young attendees to participate in a discussion about a Young Statisticians group in ISBIS, with the lure of free books kindly donated by Wiley from their trade exhibition. The purpose of the meeting was to identify activities, products and services that young people might value, which formed the basis of a survey. The meeting generated significant enthusiasm and several people volunteered to assemble lists of young people in their regions who might also be interested; these people were subsequently surveyed, and their responses informed the creation of *y*-BIS, the first



such association in the ISI and a lasting success. Paulo Canas Rodrigues, who had read about the possibility of setting up *y*-BIS in the report on the Prague meeting in the ISBIS newsletter, made contact to find out more. He led the development of *y*-BIS and became its first Vice-President on an expanded ISBIS Executive Committee. The main priorities were to set up the “*y*-BIS Committee”, define its purpose, and create a website. The purpose of *y*-BIS is to bring together young researchers and professionals working on business, financial and industrial statistics, to help support their career development and enjoyment. In particular, *y*-BIS: (i) promotes the exchange of knowledge in business, financial and industrial statistics among young statisticians; (ii) facilitates international collaboration between younger and more senior statisticians and users of statistics working in business, finance and industry; (iii) organizes regional workshops to exchange ideas and information on particular subjects in business and industrial statistics; and (iv) organizes invited paper sessions, workshops, short courses and webinars.

The leadership and wide range of activities of *y*-BIS became an inspiration for the ISI and some of the other ISI associations to establish specific groups and committees of young statisticians. The *y*-BIS Chairs have also held the post of ISBIS Vice-President for *y*-BIS<sup>[A6]</sup>.

Since its foundation in 2008, *y*-BIS has been active on many fronts<sup>[A9]</sup>. In summary,

- *y*-BIS has arranged five international conferences and many invited paper sessions, special sessions, round tables, short courses, and workshops in scientific events.
- *y*-BIS has also been very active in encouraging young people in their research in Business and Industrial statistics by providing prizes and awards to best papers and posters presented in conferences organized or sponsored by *y*-BIS.
- Publications such as book of abstracts and special issues in international scientific journals have also been *y*-BIS activities.

### *3.5 Conferences and Workshops*

Professional societies such as ISBIS are heavily reliant on conferences and workshops to gain and retain members, not least because of the opportunities they provide to attendees to interact directly with others in their network of society members, both professionally and socially. CSI and SBI invested a lot of effort in arranging such events<sup>[A9]</sup> in attractive locations and with stimulating scientific programs. ISBIS continued this tradition, and went further, by engaging the services of a professional conference organizer for several conferences, to ensure an outstanding overall experience for conference attendees<sup>[A10]</sup>.

A list of events in which ISBIS was either the organizer or a significant contributor is provided in the Appendix<sup>[A9]</sup>.

### *3.6 Membership*

Membership numbers are shown in Figure 1.

----- Figure 1 NEAR HERE -----

Membership has tended to increase over the years. However, it decreased somewhat, a few years ago, when ISBIS could not afford free student membership after ISI started charging its Associations 25 euros for each member. Additionally, the recent pandemic has probably had some impact as well (for example, face-to-face conferences tend to result in a boost to membership numbers).

### *3.7 ISBIS initiatives*

**Capacity building.** One of ISBIS' most important initiatives, especially in the last years, has been statistical capacity building. ISBIS has been very prominent, as an ISI Association, in terms of arranging events in India, Nigeria and Iran especially.

**Year of Women in Statistics and Data Science (May 2020- July 2021).** ISBIS organized a series of monthly webinars presented by leading women in Business and Industry; other online events were organized by y-BIS and in Iran. ISBIS has also been very active with online activities.

**Social media presence.** ISBIS has established a new youtube channel

(<https://www.youtube.com/channel/UCpKJTtgo8OhH62rEBczahtg>) and a LinkedIn

page: <https://www.linkedin.com/company/isbis-isi/>.

**The Gosset Lecture and Award.** The William Sealy Gosset award is presented by ISBIS in recognition of outstanding statistical work that furthers the mission of our society. To date, the awards have been made to William Bill Meeker (2015), Vijay Nair (2017), David Banks (2019), and Galit Shmueli (2021).

#### **4. Concluding remarks**

Parts of this article are based on detailed notes prepared by Nicholas Fisher and Vijay Nair in 2013.

#### **5. Acknowledgements**

We are grateful to David Banks, Yves Grize and Jef Teugels for their helpful comments on an earlier draft.

## 6. Appendices

### A1. Letter from Lai K. Chen to ISI President, 8 August 1989



THE UNIVERSITY OF MANITOBA

DEPARTMENT OF STATISTICS

August 8, 1989

Winnipeg, Manitoba  
Canada R3T 2N2

(204) 474-9826  
FAX: (204) 275-5011

Dr. I.P. Fellegi, President  
International Statistical Institute  
c/o Statistics Canada  
26-A, R.H. Coats Building  
Ottawa, Ontario  
K1A 0T6

Dear Dr. Fellegi:

I believe that the International Statistical Institute is in a good position to become an international leader in the promotion and training of statistical methods for quality and productivity improvement.

Dr. W. Edwards Deming has made the world, especially Japan and (since 1980) the Western countries, aware of the importance of statistical thinking and how statistical methods, such as statistical process control, could help to make a company more competitive in a global market. Dr. G. Taguchi and Dr. G.E.P. Box have inspired the wide applications of designs of experiments in medium and large companies in Japan and North America. Statistics has gained recognition in manufacturing industries which has never before been experienced. The effectiveness of statistical quality control for improving efficiency has also begun to be recognized in the service industry, as well as hospitals and government agencies.

For many years the ISI has played an important role in the development of official statistics and scientific exchanges between central statistical agencies around the world. Perhaps now ISI should also consider showing leadership in the global advancement of statistical quality control.

The ISI could coordinate and provide training programs, especially for developing countries, which could include:

1. Working with national statistical associations and quality control associations to offer workshops for management and employees.
2. Organizing workshops immediately before or after ISI Sessions.
3. Offering short courses for local statisticians who could become workshop instructors in the future.
4. Development of statistics courses, with emphasis in statistical quality control, at universities and technical colleges.
5. Establishing a listing of ISI members who could serve as consultants and/or workshop instructors.

.2.

To become more competitive in the global market, developing countries particularly need to have quality control programs. (e.g. The EEC requires that all suppliers must have the ISO 9000 quality assurance programs before the end of 1992). International organizations such as UN and World Bank, and other foreign aid agencies could be approached to provide funding for training programs.

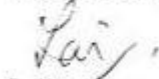
The promotion of statistical quality control could include:

1. Regular short articles on the activities and the successful stories on the applications of statistical quality control in industry and public organizations.
2. A special issue of the International Statistical Review on the development and advances in statistical quality control.

The ISI has a definite advantage to play a leading role and to gain international recognition for the implementation and advancement of statistical quality control. Some of the most distinguished quality control experts such as Dr. Deming and Dr. Box are ISI members. There are also many ISI members, especially those from Japan, who are well-known for their work in quality control. In short, ISI has the human resources in statistical quality control which cannot be matched by any other national or international organizations.

Global marketing is the trend of world economics. With the continuing effort for the North (developed countries) and South (developing countries) Dialogue and the new emphasis on East (Eastern Block countries) and West (Western Countries) Economic Cooperation, ISI has a great deal to offer to the social and economic development of the world through its activities in statistical methods for quality and productivity improvement.

Yours sincerely,



Lai K. Chan  
Professor and Head

LKC/med

c.c. Dr. G. Kulldorff, President-Elect, ISI

Ms. D.A. Lievesley, Director of the Permanent Office, ISI

Dr. S. Moriguti, Past-President, ISI



THE UNIVERSITY OF MANITOBA

DEPARTMENT OF STATISTICS

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5. Establishing a listing of ISI members who could serve as consultants and/or workshop instructors.

## A2. Minutes of Open Meeting, ISI Session, Paris, 1 September 1989

### Minutes of Statistics in Industry Open Meeting, Paris, 1 September 1989

An open meeting of the ISI was held on 1 September 1989 to consider mechanisms for playing an active role in the development of statistical practice in industry. The discussion was led by Jon Kettenring and Gunnar Kulldorff. A list of all attendees is attached.

These minutes are intended as an informal record of the discussion. They are based largely on notes taken by Nick Fisher during the meeting (apologies for omissions and inaccuracies).

#### **Kettenring**

- timing seems right for **ISI** to consider this topic
- many countries appear interested, e.g., France
- need to share information, especially with developing countries, but also with all interested countries
- broad scope of opportunities, including
  - quality, productivity, and reliability of manufactured products and software forecasting of macro and micro phenomena, including technology trends market research, e.g., segmentation and demand models
  - surveys, e.g., of customer satisfaction and employee attitudes
  - computing to include software for industrial needs and performance analysis of computers and their networks
  - pharmaceutical applications involving industrial drug testing and clinical trials
  - industrial education
  - and many more!
- what actions should ISI take?

#### **Kulldorff**

- there has been great interest in the US in the area of quality; the ASA has formed a section on quality
- the Soviet Union appears to have a quality program
- hope that we can help developing countries
  - there are few ISI members in this area; we should seek out and nominate more

#### **Kettenring**

- a conference on statistics in Industry is being planned for 1991 in Philadelphia; contact Jeff Wu for details

#### **Moore**

- ISI doesn't offer much in way of programs of interest to industrially-oriented statisticians

#### **Eddy**

- how to grow this activity? 2 examples:
  - 1/3 of members of ASA are from business and industry; meetings and publications have developed to fulfill their needs
  - IASC grew out of a small section and absorbed COMPSTAT

#### **Kulldorff**

- ISI had a session on Q&P in Tokyo
- at the Cairo meetings, sessions on process control and financial analysis/ business decision making are planned

#### **Eddy**

- **ISI** papers tend to be about solutions of problems; perhaps they should be more focused on unsolved problems

#### **John**

- at such ISI meetings, who would the speakers be addressing? distinguish between the very high level of a "Gordon Research Conference" and the very low level needed for some industrial audiences; need to win over the engineers

#### **Fisk**

- endorses John's remarks
- engineers need to adopt statistical ways of thinking; RSS committee studying these problems; don't need meetings of statisticians talking to statisticians; need ongoing activities, like IASS has been doing, to provide training in less-developed countries; also need training for managers; RSS and applied mathematicians in UK could help; ASA and ISI could cooperate

#### **Wu**

- examples of different levels of activity; AT&T — University of Wisconsin and GM (Canada) — University of Waterloo university-industrial collaborations; industries sending employees to short courses (in-house, longer ones probably better); statistical education in engineering schools is increasing with official encouragement
- ISI traditionally dominated by government; for industry, ISI may have problems as it is not involved with management issues and it may have trouble getting anything going in next few sessions; perhaps an ad hoc committee is needed; satellite meeting at next ISI session

#### **Saleh**

- need mechanisms for technology transfer, e.g., to Bangladesh

#### **Kulldorff**

- received a letter from Lai Chan on dealing with developing countries

#### **Fisher**

- Section needed
- satellite meeting should be joint with non-statistical groups and targeted at a group such as engineers or managers

#### **Tukey**

- need a committee to get things going
- what about corporate sponsorship?

#### **Kulldorff**

- hard to set up Sections; two have just been merged
- better path: ad hoc committee, then standing committee, then Section

#### **Eagleson**

- are we trying to increase ISI membership or help engineers? if the latter, perhaps ISI is not the appropriate forum
- concerning the introduction of statistical thinking to engineers, some are worse off for having been taught statistics because the subject has been badly taught (even by us!); we have no QC of our courses.
- we need to understand the role of good management and to recognize the problems encountered may be more management ones than statistics ones

#### **Eddy**

- our products are meetings and research
- satellite meetings may be the way to go
- collaboration offers one hope

#### **Wu**

- we can attract academic statisticians with interest in engineering
- ISI can play a big role as an international body; need mechanisms to interest developing countries

#### **Moore**

- In UK, accounting profession is playing a large role in the area of information, so numeracy in industry is coming from accountants' tanks!

#### **Robyn**

- problems in moving from old style to new style manufacturing
- In China and Brazil, institutions are being set up to teach QC, etc.; need for teachers; what techniques to use?

#### **Eagleson**

- training often needs to be done "on the job"

#### **Yoshizawa**

- how to persuade managers and government in Japan of need for statistical training?

#### **Tukey**

- **Can ISI deliver training?**

#### **Kulldorff**

- yes

#### **Wu**

- is ISI just a co-sponsor of these courses?

#### **Kulldorff**

- not necessarily



**Wu**

- quality practices vary enormously; perhaps we could study them in different countries and exchange ideas

**Fisk**

- perhaps persuade World Bank to commission such a study

**John**

- who are we talking to? where is our target?
- we can at least talk to our colleagues here to cure their ignorance about nature of industrial statistics

The discussion closed with general agreement that (a) an ad hoc committee should be established to pursue these matters, (b) there is a need to increase industrial membership in ISI, (c) a satellite meeting on Statistics in Industry should be held in conjunction with the next ISI Session; and (d) we should collaborate as appropriate with other interested organizations. These suggestions were passed on to President Kulldorff for further attention.

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Tokyo Japan 158

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### A3. Letter from ISI Permanent Office setting up Working Group 22 June 1990

Voorburg, 22 June 1990

Dr. N. Fisher  
CSIRO  
Division of Mathematics and Statistics  
P.O. Box 218  
LINDFIELD, NSW 2070  
Australia



Permanent Office

Director: Denise A. Lievesley  
428 Prinses Beatrixlaan, PO Box 950  
2270 AZ Voorburg, Netherlands  
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E-Mail: LIEVES@CS.VU.NL

Dear Nick,

I am writing to you concerning the working group on Statistics in Industry. I know that you have been approached informally and that in fact you are already participating in the working group. However I thought you would be interested in having a formal invitation which clarifies the position of the working group.

Due to the resurgence of interest both in developed and developing countries in quality and productivity, and an (understandable) feeling that the ISI is making too minor a contribution in this area, a number of ISI members have expressed the view that we should become more active in promoting the value of statistical work in industry. As a result an open meeting on Statistics in Industry was held in Paris. Although it only attracted 16 participants it was recognised that this was indicative of one of the problems i.e. that very few ISI members are currently working in industry.

At the open meeting it was suggested that an ad hoc Committee should be established on the topic of statistics in industry and that a satellite meeting to the Cairo Session on the topic might be arranged. Draft terms of reference for the ad hoc Committee had been prepared and the proposal for such a committee was brought to the ISI Council in Paris. However they were reluctant to establish a committee at that stage - not because of any disagreement with the specific proposal but because they wanted first of all to review the general principles of establishing committees.

At a recent meeting in the Hague the Executive Committee reconfirmed its wish to proceed in this area and hence decided to establish the working party of five people [Jeff Wu, Vijayan Nair, Nick Fisher, Lai K. Chan under the Chairmanship of Ram Gnanadesikan] to develop ideas for both the short and long term role of the ISI in the field of statistics in industry and to address the status of a committee and the relationship of a committee on this topic with the ISI Research Centre.

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Ron Pyke produced a paper to aid the Executive Committee in their discussions. I enclose a copy of it since it expands a little on what I've said and should provide an excellent starting point for your working group's deliberations. I have also enclosed a brief report of the Open Meeting held in Paris, which contains the draft terms of reference.

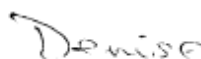
The time table is such that we would like a report which can be circulated to the Executive Committee some six to eight weeks before the Cairo Session. Obviously depending upon your recommendations we may open up discussions with Council in Cairo about establishing a Committee on Statistics in Industry.

Whilst I am writing, can I tell you that the Royal Statistical Society has just decided to add a new medal "The Greenfield Industrial Medal" to its awards. The intention is to encourage - and promote the recognition of - the application of statistical methods to industrial processes. It would be awarded for contributions to the effective application of statistical methods to the manufacturing and allied industries. I'll send you more information in due course.

Meanwhile, I hope this letter has helped. May I take the opportunity to pass on the gratitude of the Executive Committee for your valuable contribution to this important area.

See you in Uppsala?

Yours sincerely,



Denise Lievesley  
Director

Enclosures

DAL/jf/ind-stat.inv

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#### A4. Letter from ISI Permanent Office setting up Standing Committee, 5 March 1992

Voorburg March 5, 1992

Dr. N. Fisher  
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Our Reference: 53.9

Dear Dr. Fisher,


I write you concerning the composition of the ISI Standing Committee on Statistics in Industry. The Council of the ISI has approved the creation of such a Standing Committee, and it is with pleasure that I officially invite you, on behalf of the Executive Committee of the ISI, to serve on this Committee. I hope that you will be prepared to accept this invitation.

The proposed membership of the Committee is as follows:

R. Gnanadesikan (USA) - Chairman  
R. Ballance (UNIDO)  
Y. Belyaev (Russia)  
B. Bergman (Sweden)  
L. Chan (Canada)  
M. Chao (China)  
N. Fisher (Australia)  
V. Nair (USA)  
J. Wu (Canada)  
T. Yoshizawa (Japan)

Please let me have your reaction as soon as possible, so that I may notify the chairman and the Executive Committee.

Yours truly,

  
Dr. Zoltan Kenessey  
Director

Enclosure

**Standing Committee on Statistics in Industry - Terms of Reference**

1. To provide an umbrella and focus for the research and applications of statistical concepts and methodologies in industry.
2. The topics of interest should include but not be limited to quality, productivity and reliability; for example, risk management, business decision making and forecasting, market research and technology substitution.
3. Stimulate and foster technical interactions, relevant and related to the role of statistics in industry, amongst people involved in statistical theory and applications, computing technology and survey methodology.

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**A5. CSI and SBI conference and workshops 1991 – 2003**

- International Symposium in Industrial Statistics, Tel-Aviv, August 1991
- Workshop in SPC, ISI Biennial Session in Cairo, September 1991
- Special issue of the International Statistical Review on Industrial Statistics, 1993 (edited by Vijay Nair and Jeff Wu)
- Cosponsored Satellite Meeting to the ISI Biennial Session in Florence, September 1993
- Conference on Statistics in Industry, Science and Technology, Tokyo, Japan, July 1994
- Co-sponsored Conference on Statistical Methods and Statistical Computing on Quality and Productivity Improvement, Seoul, S. Korea, August, 1995
- Co-sponsored the Quality part of the scientific program of the Sydney International Statistics Congress, Sydney, Australia, July 1996
- Conference on Quality Improvement through Statistical Methods, Cochin, India, December, 1996
- Cosponsored Satellite Meeting to the ISI Biennial Session in Istanbul session on "Industrial Statistics: Aims and Computational Aspects", Athens, August 1997
- The First International Symposium on Industrial Statistics (ISIS 1), Linkoping, Stockholm, Sweden, August, 1999
- Cosponsored the Second International Conference on Mathematical Methods in Reliability - MMR 2000 in Bordeaux, France, July, 2000
- Cosponsored Second International Symposium on PLS methods, Naples, October, 2000
- Workshops in Design of Experiments, Buenos Aires and Tucuman, Argentina, March 2001, sponsored by IASI
- Cosponsored VIII Seminar on Applied Statistics of the Inter-American Statistical Institute (IASI), Panama City, July 2001
- Cosponsored the Third International Conference on Mathematical Methods in Reliability MMR2002 in Trondheim, Norway, June, 2002 (
- The Second International Symposium on Industrial Statistics (ISIS 2), Yokohama, Japan, August, 2001
- Statistics in Industry, Cochin, India, December, 2002
- The Third International Symposium on Industrial Statistics (ISIS 3), Barcelona, Spain, August, 2003, joint with ENBIS

## A6. CSI SBI annual reports to ISI 1995-2003

### Annual Report of the ISI Committee on Statistics in Industry 1995-96

This committee was created in 1992 to stimulate and fostering interactions, at an international level, among people interested and involved in industrial statistics. In order to achieve these goals, our committee has sponsored several international conferences over the last few years.

A three-day conference on Statistics in Industry, Science and Technology was held in Tokyo, Japan on July 11-13, 1994. This conference was organized by Professor Chihiro Hirotsu of the University of Tokyo. It was very successful in attracting both international and local participation with a total of more than 120 participants. There was a scientific tour of Fuji-Xerox and Nissan plants at the end of the conference.

We also cosponsored a satellite meeting in Seoul, Korea before the 50th biennial session in Beijing. The International Conference on Statistical Methods and Statistical Computing on Quality and Productivity Improvement, organized by Professor Sung H. Park of the Seoul National University, was held in Seoul from August 17-19, 1995. This conference, cosponsored with IASC, attracted more than 400 participants and more than 120 papers were presented. There was also a Quality Engineering Workshop the day before the conference and a scientific tour of Daewoo Automobile Company during the conference.

Activities planned for 1996 include cosponsoring the Quality part of the scientific program of the Sydney International Statistical Congress, to be held in Sydney July 8-12, 1996 (organized by Nick Fisher and Ron Sandland of CSIRO); and sponsoring a regional conference on Quality Improvement Through Statistical Methods in Cochin, India from December 29, 1996 to January 1, 1997 (organized by Bovas Abraham and U. Nair). There are also tentative plans for a satellite meeting in Greece before the next biennial session in Istanbul in 1997.

The committee is also exploring other ways to serve the international community, especially those interested in industrial statistics in developing countries. Ideas being explored include starting a newsletter to exchange news and information and also conducting regional workshops. Anyone with specific suggestions is encouraged to contact me or the other members of the committee.

ISI Committee on Statistics in Industry

Vijay Nair

#### List of Committee Members 1996

Vijay Nair, Chair (Malaysia)	Luis Escobar (Colombia)
Nick Fisher, Vice-Chair (Australia)	Chihiro Hirotsu (Japan)
Bovas Abraham (Canada)	Bill Meeker (USA)
Bo Bergman (Sweden)	S.P. Mukherjee (India)
Michele Boulanger (France)	Sung H. Park (S.Korea)
Ronald Does (Netherlands)	David Steinberg (Israel)

### Report from ISI Committee on Statistics in Industry 1996-97

The committee has co-sponsored two international conferences over the last year.

We cosponsored the Quality part of the scientific program of the Sydney International Statistical Congress, held in Sydney from July 8-12, 1996. This part of the program, organized by Ron Sandland and Nick Fisher of CSIRO, attracted a lot of local and international participation.

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We also cosponsored the conference on Quality Improvement Through Statistical Methods in Cochin, India from December 29, 1996 to January 1, 1997. This conference was organized by Bovas Abraham and Unnikrishnan Nair and hosted by the Cochin University of Science and Technology. About one hundred and twenty-five people attended the conference from 10 countries, representing 4 continents. The three-day conference was followed by a one-day workshop on International Statistical Standards.

For the coming year, we are cosponsoring a satellite meeting in Athens, Greece on "Industrial Statistics: Aims and Computational Aspects" from August 16-17, 1997. This conference is being organized by C. P. Kitsos.

We are continuing to explore other regional conferences/workshops as well as other ways of serving the needs of the international community. Anyone with specific suggestions is encouraged to contact me or the other members of the committee.

Vijay Nair

For the ISI Committee on Statistics in Industry

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### **Report from ISI Committee on Statistics in Industry 1997-98**

This committee was created in 1992 to stimulate and foster interactions, at an international level, among people interested and involved in industrial statistics. The committee currently consists of fourteen members, representing different parts of the world and industry as well as academia.

The committee has sponsored several international meetings and workshops over the last few years to bring together practitioners and researchers and to promote discussion on practice and research in industrial statistics. This past year, we cosponsored a very successful satellite meeting in Athens, right before the ISI biennial session in Istanbul. This meeting was organized by Dr. Christos Kitsos from Athens. The talks covered a broad range of topics in quality and reliability, design of experiments, pharmaceutical statistics and computing. The meeting attracted a large number of participants from overseas.

Plans are underway currently to hold the next meeting in Stockholm right after the next ISI biennial session in Helsinki. Professor Bo Bergman of Linköping University is the Chair of the Organizing Committee. Discussions are also underway to hold a meeting in Mexico City in conjunction with the Bernoulli Congress in 2000.

We are continuing to explore other regional conferences/workshops as well as other ways of serving the needs of the international community. Anyone with specific suggestions is encouraged to contact me or the other members of the committee. We are especially interested hearing from members residing in developing countries on their needs and from younger people who are interested in getting involved in the committee's activities.

Vijay Nair

For the ISI Committee on Statistics in Industry

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### **Report from ISI Committee on Statistics in Industry 1998-99**

In recent years, there has been a recognition that the scope of the committee should be broadened to include the area of business statistics. The ISI Executive Committee formally discussed and approved this change last year. The membership of the committee is being expanded to include new members with interests in business statistics.



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Over the past few years, the committee has organized or co-sponsored very successful conferences and workshops to bring together practitioners and researchers from around the world. These meetings have served to promote discussion on practical and research issues in industrial statistics. In order to give an identity to these meetings, the committee has decided to give an official name to its meetings. Thus, the First International Symposium on Industrial Statistics (ISIS) will be held in Linköping, Sweden August 19-21, 1999, right after the 52nd ISI biennial session in Helsinki. Professor Bo Bergman of Linköping University is the Chair of the Organizing Committee. Information about the symposium is available from the ISIS homepage at <http://www.ikp.liu.se/>.

The committee is also cosponsoring the Second International Conference on Mathematical Methods in Reliability - MMR '2000 in Bordeaux, France, July 4-7, 2000. We have also been exploring the possibility of organizing other conferences in the future. There are some preliminary discussions to hold a workshop or a conference in South America. We also hope to organize a cutting-edge conference in the area of business statistics.

The committee has been functioning as an "informal" section for people with interests in the general area of industrial statistics. There has been some discussion recently about whether we should consider becoming a separate section of the ISI. The committee will begin careful discussions on this important topic and, if appropriate, make a recommendation to the ISI Executive Committee and Council in the near future.

Vijay Nair

For the ISI Committee on Statistics in Industry

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### Annual report on activities, October 2000

1. **Name change** Following discussions held at the Helsinki ISI Session, the name of the Committee was changed to reflect the needs of the statistical community in the general areas of Business and Industry.
2. **Mission** To provide international support for the work of statisticians working in business and industry by monitoring their needs on an ongoing basis, promoting research and applications and best current practices, facilitating technology transfer, and fostering communication among members. The SBI Committee seeks to promote (both to statisticians and to industry) the value and importance of Statistics in Business and Industry, and to support suitable activities, particularly in lesser-developed countries.
3. **Action plan** To pursue this mission, the Committee has planned a number of steps:
  - (a) *Establish a Web site*  
This has been set up by a Committee member, Bill Meeker:  
<http://www.public.iastate.edu/~sbi>
  - (b) *Establish an electronic news group*  
This has also been set up by Bill Meeker: [sbi-net@iastate.edu](mailto:sbi-net@iastate.edu). (See the web site for details on how to join.) It was advertised to as many Statistical Societies and other potentially interested groups as we could manage to contact.
  - (c) *Survey needs of statisticians working in the area, and respond appropriately*  
Survey in planning stage.
  - (d) *Continue participation in conferences and workshops*  
See next item.
4. **Conference activities**

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- (a) *First International Symposium on Industrial Statistic (ISIS), Linköping 19--21 August 1999*  
This was organised by a Committee member, Bo Bergman. There were 67 paying participants.
- (b) *Second International Conference on Mathematical Methods in Reliability Methodology, Practice and Inference, Bordeaux July 4-7, 2000.*  
The Committee co-sponsored this conference.
- (c) *Second International Symposium on Industrial Statistic (ISIS2), Hiyoshi, 20-21 August 2001.*  
The Committee is sponsoring this satellite meeting for the Seoul ISI; it is being organised by Chihiro Hirotsu. (An earlier proposal to stage it in Taiwan proved not to be feasible.)
- (d) *Second International Symposium on PLS methods, Naples, October 1st-3rd, 2001*  
The Committee is co-sponsoring this conference, which is being organised by a Committee member, Carlo Lauro.

## 5. Other

The Committee is seeking to liaise with ENBIS (European Network for Business and Industrial Statistics), a recently-established European initiative in Industrial Statistics. An SBI Committee member, Ronald Does, is on the ENBIS committee.

N.I. Fisher

For the SBI Committee

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## Report on activities, 1999 - 2001

1. **Mission** To provide international support for the work of statisticians working in business and industry by monitoring their needs on an ongoing basis, promoting research and applications and best current practices, facilitating technology transfer, and fostering communication among members. The SBI Committee seeks to promote (both to statisticians and to industry) the value and importance of Statistics in Business and Industry, and to support suitable activities, particularly in lesser-developed countries.
2. **Actions over last 2 years**
  - A Web site been set up by a Committee member, Bill Meeker: <http://www.ublic.iastate.edu/~sbi>
  - An electronic news group has also been set up by Bill Meeker: [sbi-net@iastate.edu](mailto:sbi-net@iastate.edu).
  - The SBI Committee co-sponsored the Second International Conference on Mathematical Methods in Reliability Methodology, Practice and Inference, Bordeaux July 4-7, 2000.
  - The SBI Committee co-sponsored the VIII Seminar on Applied Statistics of the Inter-American Statistical Institute (IASI), Panama City, 24 -25 July 2001.
  - Just prior to the Seoul ISI, the Committee will run the Second International Symposium on Industrial Statistics (ISIS2), in Yokohama, Japan, 20-21 August 2001. (An earlier proposal to stage it in Taiwan proved not to be feasible.)
  - On behalf of the Committee, Ronald Does has organised Invited Paper topic 33, "Contemporary Methods in Quality Management", for the Seoul ISI.
  - The SBI Committee is co-sponsoring the Second International Symposium on PLS methods, Naples, October 1st-3rd, 2001. It is being organised by a Committee member, Carlo Lauro.
  - SBI is co-sponsoring MMR 2002 (Third International Conference on Mathematical Methods in Reliability) to be held in Trondheim Norway, June 17-20, 2002. Information can be found at <http://www.math.ntnu.no/mmr2002>. (Bo Linqvist and Kjell Doksum are the organizers of MMR 2002.)

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### 3. Future activities

The Committee hopes to carry out a survey of the needs of statisticians working in the business and industry. However, this needs to be discussed in Seoul at the Committee meeting.

We are in the early stages of planning ISIS3, a satellite meeting in association with the Berlin ISI Session. Our intention is to approach ENBIS (European Network for Business and Industrial Statistics), a recently-established European initiative in Industrial Statistics, to co-sponsor the meeting.

N.I. Fisher

For the SBI Committee

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### Annual report on activities, September 2001 – May 2002

**1. Mission** To provide international support for the work of statisticians working in business and industry by monitoring their needs on an ongoing basis, promoting research and applications and best current practices, facilitating technology transfer, and fostering communication among members. The SBI Committee seeks to promote (both to statisticians and to industry) the value and importance of Statistics in Business and Industry, and to support suitable activities, particularly in lesser-developed countries.

### 2. Activities since Seoul Session

The SBI Committee co-sponsored and participated in the Second International Symposium on PLS methods, Naples, October 1st-3rd, 2001. It was being organised by a Committee member, Carlo Lauro.

### 3. Future activities

- SBI is co-sponsoring MMR 2002 (Third International Conference on Mathematical Methods in Reliability) to be held in Trondheim Norway, June 17-20, 2002. Information can be found at <http://www.math.ntnu.no/mmr2002>. (Bo Linqvist and Kjell Doksum are the organizers of MMR 2002.)
- SBI will be holding ISIS3, a satellite meeting in association with the Berlin ISI Session, in Barcelona in collaboration with ENBIS (European Network for Business and Industrial Statistics), a recently-established European initiative in Industrial Statistics.
- SBI is in the early stages of planning a satellite meeting in association with the Sydney ISI Session, in collaboration with the Statistical Society of Australia Inc. This will be held in Cairns, on the Great Barrier Reef.

### 4. Planning

The SBI Committee has been developing a plan to achieve Section Status. To date, a broadly-based Consultative Committee has been established, representing various regions and academic, business and industrial interests. The Committee is in the process of obtaining input from this group about its priorities for Products and Services that the Committee, or a subsequent Section, might provide.

N.I. Fisher

For the SBI Committee

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### Annual report on activities, June 2002 – June 2003

**1. Mission** To provide international support for the work of statisticians working in business and industry by monitoring their needs on an ongoing basis, promoting research and applications and best current practices, facilitating technology transfer, and fostering communication among members. The SBI Committee seeks to promote (both to statisticians and to industry) the value and importance of Statistics in Business and Industry, and to support suitable activities, particularly in lesser-developed countries.

#### **2. Activities since Seoul Session**

The SBI Committee co-sponsored and participated in MMR 2002 (Third International Conference on Mathematical Methods in Reliability) to be held in Trondheim Norway, June 17-20, 2002.

#### **3. Future activities**

- Invited Paper session on “Statistics in engineering and advanced technology” organised for Berlin ISI
- Immediately following the Berlin ISI Session, SBI will be holding its third International Symposium on Industrial Statistics (ISIS3) as an official ISI satellite meeting in Barcelona, in collaboration with ENBIS (European Network for Business and Industrial Statistics).
- SBI is in the early stages of planning a satellite meeting in association with the Sydney ISI Session, in collaboration with the Statistical Society of Australia Inc. This will be held in Cairns, on the Great Barrier Reef.

#### **4. Planning**

The SBI Committee has developed the basis for a Strategic Plan, with key opportunities to pursue its Mission identified by surveying a wide range of industrial statisticians in all continents except Europe (where ENBIS appears to be responding well to the needs of the European statistical community).

This information should provide the basis for the next Committee Chair to move the Committee forward, not only in terms of its charter, but also to Section status. It is not unreasonable to suppose that an application for Section status would be filed well before the ISI Session in Sydney.

N.I. Fisher

For the SBI Committee

**A7. ISBIS Executives and Councils 2005 - 2021**

<b>Term</b>	<b>Executive</b>	<b>Council members</b>
2005 – 2007	President: Bovas Abraham Vice Presidents: Ronald Does (Publications), Nicholas Fisher ( Membership), William Meeker (Scientific Secretariate), Sung Park (Finance)	Rong Chen, China, Luis Escobar, Graciela Gonzalez-Farias, Osvaldo Ferreiro, Jacky Galpin, Yves Grize, Chihiro Hirotsu, Carlo Lauro, Vijay Nair, David Steinberg, S. T. Tseng, C. F. Jeff Wu
2007 – 2009	President: Nicholas Fisher President Elect: Yves Grize Vice Presidents: William Meeker (Scientific Secretariate), Graciela Farias (Finance), Vincenzo Esposito Vinzi (Publications), Geoff Vinzing (Membership)	Eugenio Epprecht, Alberto Ferrer, D.S. Hooda, Dennis Lin, George Michailidis, Werner G. Mueller, Sung Hyun Park, David Steinberg, Stefan Steiner, Shu Yamada, Wei Yuan, Zhong-Zhan Zhang.
2009-2011	President: Yves Grize President Elect: Vijay Nair Vice-Presidents: Paulo Canas Rodrigues (y-BIS), Nicholas Fisher (Scientific Program), Yulia Gel (Membership), Vincenzo Esposito Vinzi (Communications)	Riaan De Jongh, Eugenio Epprecht, Alberto Ferrer Dennis Lin, P. G. Sankharan, Stefan Steiner, Fugee Tsung, Shu Yamada Ex-Officio Council Members: George Michailidis, Werner G. Mueller (Newsletter), Fabrizio Ruggeri (ASMBI)
2011-2013	President: Vijay Nair President Elect: Vincenzo Esposito Vinzi Vice-Presidents: S. Ejaz Ahmed (Communications), David Banks (Scientific Program), Paulo Canas Rodrigues (y-BIS), Werner G. Mueller (Membership and Outreach)	Riaan De Jongh, Roger Hoerl, Wai-Keung Li, M. Pilar Muñoz, P. G. Sankharan, Martina Vandebroek, Román Viveros-Aguilera, Sergio Yáñez, Ex-Officio Council Members: Shawn Mankad (Webmaster), N. Balakrishna (Editor), Fabrizio Ruggeri (ASMBI)
2013-2015	President: Vincenzo Esposito Vinzi President-Elect: David Banks Vice-Presidents: Nalini Ravishanker (Scientific Program), Martina Vandebroek (Membership and Outreach), David M. Steinberg (Communications), Eric Laber (y-BIS)	Oliver Chinganya, Luis A. Escobar, Roger Hoerl, Wai-Keung Li, M. Pilar Muñoz, Irena Ograjenšek, Galik Shmueli, Román Viveros-Aguilera, Ex-Officio Council Members: Naveen Narizetti (Webmaster), Román Viveros-Aguilera (Newsletter), Fabrizio Ruggeri (ASMBI)
2015-2017	David Banks (USA), President Nalini Ravishanker (USA), President-Elect Vice-Presidents: Roger Hoerl (Membership and Outreach), Kristina Lurz (y-BIS), Pilar Muñoz (Communications), Kwok Tsui (Scientific Program)	Narayana Balakrishna, Oliver Chinganya, Luis A. Escobar, Birger Madsen, Irena Ograjenšek, Changsoon Park, Paulo Rodrigues, Galit Shmueli Ex-Officio Council Members: Naveen Naidu Narizetty (Webmaster), Fabrizio Ruggeri (ASMBI), Román Viveros-Aguilera (Newsletter)
2017-2019	President: Nalini Ravishanker Fabrizio Ruggeri (President elect) Vice-Presidents: Irena Ograjensek (Scientific Program), Román Viveros Aguilera (Communications), Daniel Jeske (Membership & Outreach), Tahir Ekin	Olawale Awe, Narayana Balakrishna, Paulo Canas Rodrigues, Yili Hong, Birger Madsen, Rahim Mahmoudvand, Julie Novak, Changsoon Park Ex-Officio Council Members Lindsay Berry (Webmaster), Fabrizio Ruggeri (ASMBI), Román Viveros-Aguilera (Newsletter)
2019-2021	President: Fabrizio Ruggeri President-Elect: Daniel Jeske Vice-Presidents: Luca Frigau (y-BIS), Martina Vandebroek (Scientific Program), Tahir Ekin (Membership and Outreach), Román Viveros-Aguilera (Communications)	Olawale Awe, Julie (Novak) Beckley, Yili Hong, Wee-Yeap Lau, Caterina Liberati, Rahim Mahmoudvand, Rituparna Sen, Sergio Yáñez-Canal Ex-Officio Council Members: Dylan Friel (Webmaster)

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Term	Executive	Council members
2021-2023	President: Daniel Jeske President Elect: Paulo Canas Rodrigues (Brazil) Vice-Presidents: Matilde Bini (Scientific Program), Babak Zafari (Communications), M. Z. Anis (Membership), Nathaniel Stevens (y-BIS)	Caterina Liberati, Rituparna Sen, Sergio Yañez, Canal, WeeYeap Lau, Alyson Wilson, Lizanne Raubheimer, Len Kenao, Elena Zarova Ex-officio Council Members: Fabrizio Ruggeri (ASMBI), Roman Viveros-Aguilera (Newsletter), Dylan Friel (Webmaster)

CONFIDENTIAL

## A8. First ISBIS Strategic Plan, 2007 – 2011<sup>4</sup>.

### Introduction

The International Society for Business and Industrial Statistics was formed with the aim of facilitating the advancement and exchange of knowledge in business, financial and industrial statistics. ISBIS does this by promoting research and applications, and best practice; by enabling technology transfer; and by fostering communication amongst its members. ISBIS seeks to promote the value of statistics to business and industry and to support enabling activities, particularly in lesser-developed countries. The objectives of the ISBIS are:

- to promote the advancement and exchange of knowledge in business, financial and industrial statistics;
- to build international collaboration among statisticians and users of statistics working in business, finance and industry;
- to exchange ideas and information at an international level through conferences, workshops and publications;
- to encourage links between statisticians from developing and developed countries;
- to develop and promote relationships among national and regional professional societies or groups involved in activities related to business, financial and industrial statistics.

This document provides a Strategic Plan of objectives and related strategies for ISBIS for the period August 2007 – August 2011, the period for which the current and next ISBIS Executive and Council will be running the Society's activities.

ISBIS members are invited to participate in making the Plan work as best possible.

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<sup>4</sup> Abstracted from Four-year Plan 2007–2011. Goals and Strategies

Area / Goal	Strategies
<p><b>1. Membership</b> Boost membership amongst the following groups (unordered):</p> <ul style="list-style-type: none"> <li>• academics</li> <li>• people like attendees at Fall Technical Conference in North America</li> <li>• ASQ Statistics Division (mostly practitioners)</li> <li>• ENBIS, SPES, ...?</li> <li>• people from Less Developed Countries</li> <li>• young people</li> <li>• people in Business, Finance and Insurance many of whom would not regard themselves as statisticians</li> <li>• Institutions</li> </ul>	<p>1.1 Attract new members via Meetings and Activities 1.2 Develop relationships with sister organizations 1.3 Direct recruitment 1.4 Establish a group for Young Statisticians (y-BIS) 1.5 Devise and implement a process for recruiting Institutional Members</p>
<p><b>2. Meetings and Activities</b> Organise, or participate in, a variety of meetings designed to meet the diverse needs of ISBIS members, such as</p> <ul style="list-style-type: none"> <li>• meetings with leading edge scientific content</li> <li>• special topic meetings</li> <li>• meetings aimed more at practitioners</li> <li>• meetings focussing on regional issues &amp; to assist Less Dev countries</li> </ul>	<p>2.1 Run a major international conference every non-ISI year  2.2 Participate actively in ISI Sessions 2.3 Run regional meetings and other activities 2.4 Continuing education</p>
<p><b>3. Publications</b> Develop a variety of publications to meet the diverse needs of members</p>	<p>3.1 Publish a Newsletter 3.2 Publish ASMBI 3.3 Introduce ISBIS “own” publications</p>
<p><b>4. Website</b> A website is of strategic importance for ISBIS, to encourage visitors to become members, as a resource for members (e.g. ASMBI) and as a forum for communication.</p>	<p>4.1 Relocate, revise and update web site  4.2 Implement a Procedure for approving design and broad content</p>
<p><b>5. Links to other societies</b> ISBIS recognizes that its Mission is best pursued in partnership with the regional organisations working to the same ends.</p>	<p>5.1 Involve prospective partner organizations in biennial ISBIS conferences 5.2 Arrange joint membership</p>
<p><b>6. Governance</b> On a regular basis ISBIS needs to review how it operates, including identifying and pursuing opportunities to update its Statutes and By-Laws. It also needs to ensure that it conforms with the Statutes and By-Laws appropriately, e.g. by running the election process in a timely fashion.</p>	<p>6.1 Develop appropriate processes for electing Honorary Life Members 6.2 Prepare appropriate Annual Reports and Membership / Financial Statements 6.3 Run the ISBIS elections in a timely fashion</p>



## A9. ISBIS events

Numerous conferences in which ISBIS participated by taking responsibility for some of the scientific program, but not as an organiser, are not listed. Additional details can be found at <https://www.isbis-isi.org/pastconferences.html>.

In the following list, “International Symposium on Business and Industrial Statistics” has been abbreviated to ISBIS.

ISBIS 2005, Cairns, Australia, April 2005

ISI Satellite Meeting, The Azores, Portugal, August 2007

[ISBIS 2008](#), Prague, Czech Republic, July 2008

International Conference on Applied Probability and Statistics ([CAPS2008](#)), Hanoi, Vietnam, December 2008

European Meeting on Business and Industrial Statistics (EURISBIS09), Cagliari, Sardegna, May-June 2009

ISI Satellite Meeting: Stellenbosch Statistical Symposium, Stellenbosch, South Africa, August 2009

6th International Conference on PLS and Related Methods, Beijing, China, September 2009

[ISBIS 2010](#), Portorož, Slovenia, 2010

[ISBIS 2012](#), Bangkok, Thailand, June 2012

[ISI Satellite Meeting](#), Hong Kong, August 2013

[ISBIS 2014](#), Durham, NC, USA, August 2014

[ISI Satellite Meeting](#), Campinas, Brazil, July 2015

[ISBIS 2016](#), Barcelona, Spain, June 2016

ISI Satellite meeting, White Plains, NY, USA, June 2017

[ISBIS 2018](#), Athens, Greece, July 2018

[ISI Satellite Meeting](#), Kuala Lumpur, Malaysia 2019

[ISI Satellite meeting](#), online, 2021

[ISBIS 2022](#), Napoli, Italy, June 2022

### y-BIS activities

#### y-BIS events

Joint Meeting of y-BIS–International Young Business and Industrial Statisticians, and jSPE–Young Portuguese Statisticians, Lisbon, Portugal, July 23–26, 2012. About 130 participants from 22 countries.

y-BIS 2013: Joint Meeting of Young Business and Industrial Statisticians, Istanbul, Turkey, September 19-21, 2013, sponsored by ISBIS and ENBIS. About 50 participants from 15 countries.

y-BIS 2017: Modern Methods in Insurance Pricing and Industrial Statistics, Hamedan, Iran, September 3-7, 2017. More than 80 talks and 33 poster presentations.

y-BIS 2019 – ISBIS Young Business and Industrial Statisticians Workshop on Recent Advances in Data Science and Business Analytics, Istanbul, Turkey, September 25-28, 2019. About 200 participants including 10 keynote speakers, 8 workshops with 11 speakers, 3 invited and 16 con-tributed parallel sessions with 70 speakers and one poster session.

First Event on Play with Real Data, Bu-Ali Sina University, Hamedan, Iran, December 31, 2020, where companies provided data and groups of young researchers have been working on them. Ten groups were selected from the total of 32 groups to present their findings in a webinar on January 30, 2021. About 200 participants.

### **y-BIS awards**

NISS/ASA Best y-BIS Paper Award 2010. Award for Young Researchers attending the International Symposium on Business and Industrial Statistics 2010 (ISBIS-2010). Sponsored by the American Statistical Association and the National Institute of Statistical Sciences.

NISS/ASA Best y-BIS Paper Award 2012. Award for Young Researchers attending the International Symposium on Business and Industrial Statistics 2012 (ISBIS-2012). Sponsored by the American Statistical Association and the National Institute of Statistical Sciences.

Best yBIS-jSPE 2012 Poster Award, for the best poster presented at the Joint Meeting of y-BIS–International Young Business and Industrial Statisticians, and jSPE–Young Portuguese Statisticians, Lisbon, Portugal, July 23–26, 2012.

Funding from the International Society for Business and Industrial Statistics (World Bank) for Participants from Developing Countries, in the Joint Meeting of y-BIS and jSPE, Lisbon, Portugal (support for the participation of 5 participants).

yBIS 2013 Best Paper Award, for the best paper presented at the Joint Meeting of Young Business and Industrial Statisticians, Istanbul, Turkey, September 19-21, 2013.

NISS/ASA Best y-BIS Paper Award 2014. Award for Young Researchers attending the International Symposium on Business and Industrial Statistics 2014 (ISBIS-2014), separate awards for statisticians from developed and developing nations (3 places for each category). Sponsored by the American Statistical Association and the National Institute of Statistical Sciences.

NISS/ASA Best y-BIS Paper Award 2016. Award for Young Researchers attending the International Symposium on Business and Industrial Statistics 2016 (ISBIS-2016), separate awards for statisticians from developed and developing nations (3 places for each category). Sponsored by the American Statistical Association and the National Institute of Statistical Sciences.

### **y-BIS publications**

Special Issue of Communications in Statistics - Simulation and Computation devoted to the Joint Meeting of y-BIS and jSPE. Guest Editors: Paulo Canas Rodrigues and Eric Laber. <https://www.tandfonline.com/toc/lssp20/44/10>.

Special issue of ASMBI for y-BIS 2019: Recent Advances in Business Analytics and Data Science. Guest Editors: Tahir Ekin, Gavino Puggioni, and Paulo Canas Rodrigues. <https://onlinelibrary.wiley.com/doi/10.1002/asmb.2610>.

Book of abstracts of the Joint Meeting of y-BIS and jSPE. ISBN: 978-972-8893-31-6.

Book of abstracts of the y-BIS 2013: Joint Meeting of Young Business and Industrial Statisticians. ISBN: 978-975-6264-90-4.

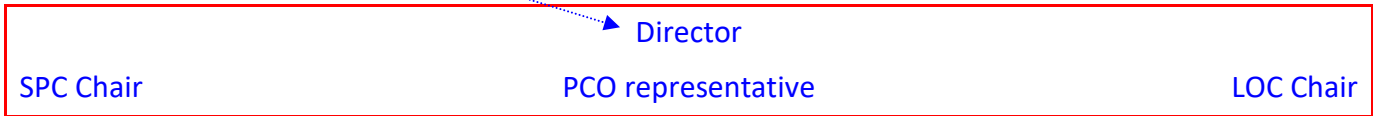
**A10. ISBIS template for conference organisation**

**Organising an excellent conference – Key components**

(developed in consultation with Milena Zeithamlova, [Action-M Agency](#), June 2008)

- Overall coordinator
- ‘Public face’ of conference
- Involved in all **key** decisions
- Lead role in obtaining sponsorship

Organising Committee



**Scientific Program Committee (SPC)**

- International (for an international meeting)
- **Selects plenary speakers**
- **Selects key scientific themes**
- Selects Invited Paper session organisers
- Plans speaking program (lengths of sessions, speaking times, allocation of Plenary, Invited and Contributed papers and poster sessions)
- May assist with raising funds (e.g. **application for research funding**)
- **Involved in setting deadlines**
- **Proceedings volume**
- **Approves pre- and post-conference workshops**

**Professional Conference Organiser (PCO)**

- **Manages the project: in collaboration with the Director, develops and monitors the event plan**
- Advice about **choice of venue**
- Negotiates venue contract
- Arranges a range of accommodation and negotiates prices
- Develops and manages budget
- Handles all announcements
- Provides advice on **obtaining sponsorship**
- Handles all registration and other logistics
- First point of contact for most non-scientific matters
- Produces program
- Arranges Partner Program
- Ensures that appropriate conference tours organised
- Plans and manages trade exhibition
- **Sets fees and deadlines**
- Develops and manages Web site

**Local Organising Committee (LOC)**

- Decides on **social program**, with input from the Organising Committee
- Helps raise funds – sponsorship
- Arranges voluntary help

## Further comments

1. The Professional Conference Organiser (PCO) needs to be contracted at the very beginning, before the venue is selected. PCOs have far more experience in negotiating optimal arrangements with venue managers. Also, the PCO is experienced in developing a provisional budget.
2. When negotiating with the PCO, the Society needs to have an open discussion about the full range of fees being charged. For example,
  - In many situations, the PCO will receive a reimbursement (sometimes of the order of 10%) from hotels and other establishments providing accommodation. If returned to the Society, such money can be used to secure additional free accommodation or for room upgrades.
  - A similar reimbursement may well occur with bookings for tours associated with the conference.

These reimbursements offer significant opportunity either to reduce costs to participants (through lower registration fees) or to provide a better conference (support for more invited speakers to enhance the scientific program, improved catering, support for students or other deserving prospective attendees, ...).

3. The budget should include provision for a surplus, and a statement of how this surplus is to be allocated.