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The role of national statistical societies in  
defending statistical integrity – with a  
particular focus on the case of the RSS

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## Apologies that I cannot be at the IAOS in person

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- Draw on my experience not just of the RSS but also of the ASA and ISI
- Begin with an assessment of the missions, visions and strategic objectives of the three societies because their endeavours regarding the integrity of statistics have to be seen in this context
- Also consider the financial and other constraints on their activities





# RSS purpose

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- **Nurture the discipline** of statistics by publishing a Journal, organising meetings, setting and maintaining professional standards, accrediting university courses and operating examinations.
- **Promote the discipline** of statistics by disseminating and encouraging statistical knowledge and good practice with both producers and consumers of statistics, and in society at large.
- **Provide effective and efficient services to members** which support their professional and academic interests and their endeavours to advance the other objectives of the Society.





# ASA mission

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- Support excellence in statistical practice, research, journals, and meetings
- Work for the improvement of statistical education at all levels
- Promote the proper application of statistics
- Anticipate and meet the needs of our members
- Use our discipline to enhance human welfare
- Seek opportunities to advance the statistics profession





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## The ISI pursues its mission by

- promoting excellence in statistical research and research training;
- promoting excellence in statistical education;
- promoting excellence in the practice of Statistics;
- supporting the international statistical community in promoting the establishment and maintenance of sound statistical institutions;
- fostering the appreciation in governments and the public at large of the true value of Statistics and statistical methods to all aspects of human endeavour
- facilitating collaboration among diverse groups of ISI members, and among statistical societies and other national and international organisations having statistical interests;
- providing coordinating services, such as a broad-based website, the biennial Sessions, appropriate publications, promotion of professional standards, outreach programs, and affiliation with other international bodies;
- continually evolving and developing new initiatives to maintain leadership of an evolving discipline in changing environments.





# Sources of funds

**individual membership fees**  
**institutional and corporate fees**  
**sales of journals and books**  
**conference registration**  
**grants and subventions**  
**sponsorship**  
**rental of accommodation**  
**examination fees**  
**charges for 'professional services'**  
**gifts and legacies**  
**sales of 'souvenirs'**  
**interest on investments**  
**'in kind' support**

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# Main categories of expenditure

**staff salaries/ pensions**

**other staff costs**

**accommodation costs**

**IT, telephone etc office costs**

**printing and postage for journals  
and newsletters**

**translation**

**simultaneous interpretation**

**conference accommodation**

**legal costs**

**support for volunteers**

**support for poorer  
members**



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## Resource challenges

- Finance
- Lack of flexibility over expenditure
- Electronic journals – who pays?
- Continuity and sustainability when depending upon volunteers
- Need for greater support for statisticians in poorer parts of the world
- Involving younger people in the societies
- Tension re. people representing organisations v. being there in their own professional right
- How to reach isolated statisticians
- The term statistics itself can be restricting particularly these days with the rise of terms such as data science







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The next few slides will address each of the key roles of statistical societies in a little more detail before focussing on the issue of enhancing the integrity of official statistics





# To promote the integration of statistics

- Across users and producers (particularly in relation to official statistics)
- Across practitioners and theoreticians
- Across educators and employers

*Through*

Supporting user groups

Publishing Newsletters and Journals

Running integrated conferences

Regular scientific programme

Social activities

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## To improve statistical understanding and education

- providing training
- running exams
- certification of statisticians
- authentication of courses
- meetings of young statisticians
- holding competitions
- awarding prizes, scholarships
- mentoring systems
- career fairs
- publicising job opportunities





# To improve statistical education

- Running training for journalists
- Giving prizes for good media coverage of statistical issues
- Providing training in communication for statisticians
- Producing of statistical magazines
- Issuing press releases on statistical matters
- Running a press office
- Employing scientific spokesmen

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## To support the professions

- Establishing ethics committees/ committees on issues of public interest
- Promulgating professional ethics/ codes of conduct
- Providing training on ethics
- Supporting an environment in which people can discuss problems ( a safe space)
- Running mentoring training and systems
- Issuing public statements on issues of public interest

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# ISI declaration on professional ethics

<https://www.isi-web.org/index.php/activities/professional-ethics>

- highlights the tensions, even inherent conflicts, between the different goals
- sensitises statisticians to the issues
- informs the debate
- advocates the discussion of ethical dilemmas
- encourages openness in relation to the decisions
- Discusses obligations to
  - society
  - funders and employers
  - colleagues
  - subjects of our research





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- Turning now to talk about the work of the RSS in relation to the integrity of official statistics





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# Upholding the integrity of statistics

- The issue that official statistics should be trusted and trustworthy is of great importance not just to those working in national and international statistical agencies but for EVERY statistician
- The RSS has been very assiduous in communicating that official statistics are important to us all because they hold a mirror up to our societies and they help to ensure that policies are underpinned by sound data
- The website has been used very effectively to communicate the Society's efforts to influence change see [https://www.rss.org.uk/RSS/Influencing\\_Change](https://www.rss.org.uk/RSS/Influencing_Change)
- The RSS has provided a place where official statisticians and others can talk about some of the problems which they confront – these may be political but are often organisational or methodological







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# Impartiality

- The RSS has managed to walk the very fine line between advocacy for the statistics discipline/ profession, and independence
- The RSS is prepared to speak out when there are concerns about any aspect of the statistical system
- Thus the RSS is a 'critical friend' in the official statistical system
- It has been hard to achieve this and sometimes official statisticians have felt that there was not enough understanding of the pressures they are under, sometimes Governments have felt the RSS is too 'otherworldly' in its endeavours and sometimes the broader statistical community has felt that the RSS is not brave enough in its condemnation of bad practice
- The fact that criticism can come from a number of quarters may indicate that a balance is being achieved!





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## How has it been achieved?

- The RSS has developed (and published) a clear view of the principles involved in official statistics
- Criticisms/concerns are framed in terms of these principles rather than targeting individuals
- Individuals are not named and shamed if this can be avoided
- The RSS has been willing to put a lot of effort into working with Government departments on developing systems to protect the integrity of official statistics
- The resources of the Society are at the disposal of official statistics particularly when they want to consult users



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## How has it been achieved ? (continued)

- The RSS has been a very vocal advocate for resources and support for official statistics
- It has acted as an mediator when there are disagreements between users and producers of data
- It has developed an appreciation of whether behind the scenes diplomacy or a public statement would be more effective
- The RSS is not afraid to make public statements if an issue warrants it, but makes sure that it understands the facts of a case before taking any action





# Developing strong relationships with current and past official statisticians

- In order that the Society understands the pressures and the incentives inherent in the official statistical system it involves official statisticians in relevant committees and working parties
- Sometimes this puts a current official statistician in a compromising position and in such cases retired official statisticians, or others close to government but not employed in government, might be consulted

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# Remaining challenges

- How to issue timely comment v. how to be sure of the justification for an intervention

(it is very easy to make fast emotional statements in reaction to an issue on the basis of inadequate information and this can undermine the credibility of the Society)

- How to involve current official statisticians in the Society without compromising their position

(for example is it acceptable for senior staff of the official statistical system to hold elected positions in the Society?)

- Statements of the Society need the endorsement of its members but sometimes such statements should be independent of some members – this balance is hard to achieve

(the RSS has in the past attempted to create this separation by establishing an official statistics working party to advise the RSS President )

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## Success factors

- Various Governments of different political colour have shown they care what the RSS says
- The RSS is often invited to sit on relevant bodies such as the appointment panel for the national statistician
- The RSS is consulted about changes to the legislation, to the statistical system, to the data to be collected etc
- The Media turn to the RSS for statistical comment and advice
- RSS commentary has rarely been challenged and its own integrity is generally recognised





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## International challenges

- Should we intervene when there are concerns about the independence and authority of a statistical system in another country?
- Often information is partial and we have to understand the provenance and veracity of the information we have
- How can we improve our understanding of the situation?
- Calling a Government to account can expose and undermine the official statisticians within that country
- Do we understand enough to intervene?
- We cannot assume the independence of national statistical societies





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## International Challenges continued

- How might we intervene?
- What is the role of the international agencies in such discussions?
- Can we build stronger relationships with international press channels (such as Reuters) so that we have partners in promoting statistical integrity in countries where we have concerns?
- If we do nothing are we bringing the international – and perhaps even our national – statistical systems into disrepute?
- Are we leaving the statisticians more exposed by not supporting them internationally?

**DISCUSS !**



