International Statistical Institute
Academy for Capacity Development

Strategy

Version 3.0

February 2024

Contents

1. Overview

The ISI's mission is to **promote the understanding, development, and good practice of statistics worldwide, by providing the core global network for statistics.** This strategy document sets out our priorities and plans for supporting statisticians and other data professionals in developing their capacity via a new ISI Academy.

The proposed **ISI Academy for Capacity Development** performs two separate, but related functions underpinned by the global ISI Network:

1. **Quality function**
   to carry out ongoing services which support improvements and high standards in capacity development (CD) practices globally.
2. **Project function**
   to support the professional delivery, management, or facilitation of specific CD projects where the ISI and its Associations have a comparative advantage to do so
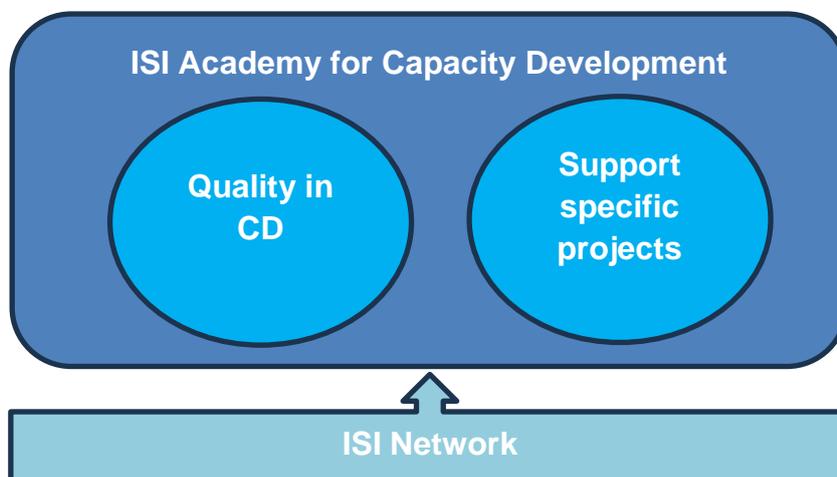
2. Background

The proposals are anchored across the ISI's Strategic Priorities for 2022-2025. The ISI Academy strategy is a living document. It will continue to be shaped by ISI and its Associations' members and other partners who wish to collaborate in its development. Increases in the ISI's capacities and funding will be required to implement the strategy.

The strategy is based on evidence from ISI's organisational and individuals members, including across the ISI Associations, about key issues for capacity development related to the ISI. It is widely recognised that:

- the strengths of the professional networks of the ISI and across its Associations are not yet full tapped into
- there are significant limitations on the potential impact of the ISI and its Associations without dedicated central skills and resources for managing capacity development and an improved financial means of augmenting members' voluntary contributions
- the priority demands for services related to capacity development in the modern data ecosystem need cross-sectoral, innovative, or further funded solutions, and

- the ISI's greatest strengths come from it being a scientifically rigorous, independent, and cross-disciplinary global institution.

3. Why now

The proposal of an ISI Academy for Capacity Development is the ISI's response to the changing needs and context for its activities within the challenges and opportunities of the modern data ecosystem. This includes the rapid digitisation of data sources and processes, persistent data gaps, persistent challenges of capacity development in developing and other countries, new challenges for evidence-based decision making, a rapid expansion of the size and diversity of data communities where we need to step over disciplinary boundaries and be more flexible, and the need to be innovative in attracting more resources for statistics.

Reflecting on the current situation, the need for more concerted and strategic action by the ISI family is particularly urgent. There has been an explosion in demand across statistical sectors, business, and other sectors of society, across Low-to-Middle Income Countries (LMICS) and developed countries alike, for data/statistical capacity development, data systems modernization, and data quality/integrity. There has also been an explosion of multilateral initiatives in capacity development, which require high levels of expertise, coordination, and quality control to be successfully implemented[1].

The ISI also has a comparative advantage in its potential to help coordinate among partners involved in capacity development, being independent of narrow organisational interests. There is a significant need to minimise fragmentation in the provision of capacity development services and minimise the duplication of efforts. While all organisations in principle agree to optimise coordination, the reality is that other organisational priorities often inhibit the most efficient outcomes being achieved.

4. Core Principles

A key aim of the ISI is to ensure an efficient value-added contribution to statistical capacity development according to the ISI's comparative advantage. To do this, the ISI Academy will focus on facilitating and supporting its members and partners in optimising their abilities to deliver effective and efficient statistical capacity development activities. The activities of the ISI Academy will *use the ISI Network* and meet the following criteria:

| 1	Meet proven priority demands for capacity development
2	Support scientific processes and independence
3	Transfer knowledge across disciplinary boundaries

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[1] For example, in a relatively short recent period we've seen: G7 "Roadmap for Cooperation on Data: Free Flow with Trust"; G20's AI principles to shape global data governance, and Round 3 of the G20 Data Gaps initiatives is underway (led by the IMF); UN, World Bank, UNFPA, and UNDP High Impact Initiative on "Power of Data"; World Bank is scaling up investments in data and statistical systems to implement recommendations from its 2021 World Development Report: Data for Better Lives; World Bank is establishing the Development Economics Global Institute to support capacity building on data and statistics in LMICs; UN has launched a Global Digital Compact; UN has launched an HLCP Working Group on International Data Governance; UNDP has launched a Data Futures Platform.

4	Leverage synergies and efficiencies with partner organisations
5	Provide scalable and practicable solutions with sustainable long-term impacts[2]

5. The ISI Network

The ISI exists to support its members and its Associations' members. These benefit from being part of a community that are working or have worked with statistics and data science across many sectors and sub-sectors within academia, government, business, and education. In 2023, there were over 4500 members from over 100 countries in the ISI and its family of seven professional Associations[3] with their goals as per the figure below.

Figure 1 The ISI network of professional Associations
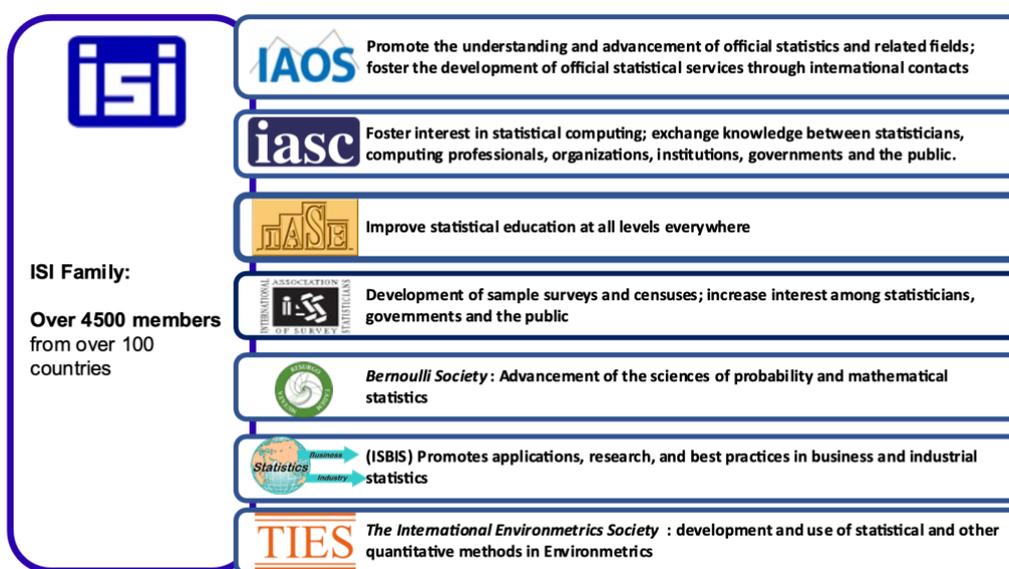
The wider network also includes interconnected professional communities where individual ISI and Association members work, the organisations and people they work with, and other professional bodies of which they are also members such as national statistical societies.

The ISI Academy is designed to enhance the potential of our community to work across these boundaries in developing statistical capacity according to an efficient mobilisation of resources.

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[2] Includes consideration of the need to ensure: relevance to our broad community in terms of social equality, geography, sectors, and the diversity of contexts for data ecosystems; valuing younger and more experienced professionals appropriately; and providing open-source tools and services.

[3] International Association of Official Statistics, the Bernoulli Society, International Association of Statistics in Education, International Association of Statistical Computing, International Association of Sample Surveys, International Environmetrics Society, International Society for Industrial & Business Statistics

6. How the Academy will operate

A key comparative advantage of the ISI in capacity development is a freedom to be flexible in delivery mechanisms according to principles driven by the professional needs of its members, independent of political or narrow organisational needs.

The Academy aims to provide two inter-related functions concerning the supply of and demand for statistical capacity development at global and regional levels. These will be carried out by:

- ➢ optimising the ISI's potential value added in working across disciplines
- ➢ using the ISI's independence
- ➢ partnering with other relevant capacity development suppliers, and
- ➢ leveraging skills and expertise across its network.

Resourcing arrangements and levels of ambition will respond to available funding. The ISI Permanent Office and voluntary contributions from its members will allow for a limited approach and achievements.

A core team of Full or Part-time fixed term employees is required to develop the Academy strategy further, establish detailed business planning and funding streams, and establish and manage larger start-up projects and activities. This team could employ or otherwise mobilise human and other resources from the ISI Network and beyond in flexible ways to develop and deliver activities, according to the core principles and objectives set out in the Academy strategy. New governance arrangements within the ISI will need to be established as relevant[4].

6.1 Mobilising the ISI Network

The ISI Permanent Office (PO) will lead on optimising the potential of the ISI Network to support the Academy's objectives but also to strengthen the ISI family more broadly.

Objectives that will specifically support the Academy from 2024 to 2030 include:

a) **mapping skills and expertise available among the ISI Network** regionally and internationally according to known capacity development priorities, including where expertise is needed to be shared across sectors
b) providing **channels for communication** about supply and demand issues in capacity development across the Network
c) providing a **conduit for members and statistical stakeholders to articulate and coordinate on capacity development** needs and solutions across sectors

The PO will also support the Academy more generally by enhancing the ISI Network by:

d) **growing and further diversifying membership** of the ISI and its Associations, including by enhancing membership benefits
e) developing existing and new types of **networking and knowledge-development events**, and

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[4] Some options are discussed in the Cover Note to the Strategy

f) deepening and widening **partnerships with other statistical associations and other professions and sectors**.

6.2 Quality function
See Annex A for more background on the rationale for the quality function proposals.

Drawing on the skills and expertise across sectors in the ISI Network, the focus of activities under will be on improving the supply of capacity development services and products via an independent and professional lens. A core principle will be to consider *statistical capacity development* as a professional discipline. This discipline can be enhanced by the provision of tools and services overseen by an independent institution such as the ISI Academy. This should equally benefit funders, suppliers, and beneficiaries of capacity development activities.

Priorities could include the following. These would be adapted specifically to learning and contexts for statistics across sectors. They would use expertise and knowledge from across sectors and disciplines in and outside of statistics and data science:

1. **Supporting quality in training and technical assistance –** initially, supporting the development of international standards and guidance on quality, toolkits for practitioners. Later, with adequate funding, training and accreditation of training according to a *core curricula* (see below), with the potential to support qualifications in the discipline of statistical capacity development.
2. **Quality Monitoring –** monitoring international efficiency in capacity development, peer review, research, and advocacy
3. **Supporting good practice in data use -** mobilising the ISI Network to respond to emerging challenges in using statistics and data for the public good in the modern data ecosystem, such as related to the use of AI, with a focus on ensuring high-return on investments in statistics

Potential topics for a *core curricula for statistical capacity development* professionals include the following:

Topic	Potential details
Training and teaching skills	• Skills and planning for effective training and teaching in professional environments • Converting knowledge and experience about statistics and data into learning and practical outcomes for beneficiaries
Project proposal development	• Best practices in developing tenders or project proposals in the private or public sector • Understanding and navigating the marketplace for services; understanding donor and beneficiary needs, recruiting experts • Building-in sustainable outcomes
Project & Programme Management	• Adapting generic PPM and managing teams in statistical capacity development environments • Assuring sustainable outcomes
Adaptive approaches	• Assessing beneficiary needs and adapting services according to challenges and opportunities related to geography & political economy, levels of statistical capability etc.
Communication	• Mapping, understanding, and communicating appropriately across the delivery chain/ stakeholder landscape • Use of languages and navigating cultural expectations
Mainstreaming user needs	• Considerations for integrating user engagement in statistical processes • Teaching soft skills • Dealing with and anticipating challenges in the digital data ecosystem

Given the known challenges and ISI's comparative advantages, the table below sets out potential types of activities that could be further developed and delivered to support this curricula.

Activities	Potential outputs
Training and guidance	• Develop and update international standards • Develop and update a toolkit for practitioners with best practices, implementation guidance, templates, and support for the use of technology, support on use of non-English languages etc. • Dissemination of learning tools and knowledge from Academy-led capacity development projects and other organisations where relevant – via events and an open Learning Hub on statistical capacity development Potentially leading to: • Training and training materials around a core curricula for statistical capacity development (see section B.6 below) • Qualifications and accreditation (of training courses) according to curricula
Quality Monitoring	• **Monitor and report at least annually on statistical capacity development activity, international best practice, coordination, and efficiency in statistical capacity development** (see box below) • Peer review function for capacity development project proposals and outputs • Research and development of innovative methods and practices • Advocate for continuous improvements across the global statistical community

Supporting good practice in data use	• Establishing networks that quickly mobilise expertise to support better use of data and statistics in providing:
	  • independent advice on the use and development of data and statistics at macro scales – national, regional, and international institutional levels
	  • reactive support to existing national and regional statistical societies/scientific communities in promoting good practice
	  • pro-active front-line support to countries and regions where statistical societies/scientific communities don't exist or are weak– including by in parallel developing local independent strong statistical/data communities in the long term.

The potential for an annual ISI Academy Capacity Development Monitoring Report

For a small level of additional funding, the Academy could be established with one priority initial function. This could be to provide an annual report that independently collates evidence from ISI individual and organisational members and reports on the successes and challenges in statistical capacity development, according to the principles underpinning the Academy. This in turn could guide the priorities for the Academy's development and the actions of other players in capacity development. A small editorial/research team could be assembled from relevant ISI members, governed by the ISI Executive Committee. They would be tasked with collecting and analysing evidence and providing recommendations for either follow-up by the Academy, the ISI and its Associations, or other actors in statistical capacity development.

Key sections might focus on:

• Skills for delivering capacity development (linked to the Academy Curricula)
• Partnerships and coordination for improving capacity development
• Highlighting good practices in capacity development delivery
• Highlighting challenges and good practices in the developing the capacity of data users
• Other key challenges for the quality of statistical capacity development as highlighted in section A.3 of the Annex to the ISI Academy Strategy

Such a function could complement other relevant reports such as the PARS21 Partner Report on Support to Statistics (PRESS), which focusses on monitoring financial flows into statistical capacity development.

6.3 Project support function

Operating across statistical sectors, this function would be based on flexibility and innovation in delivery methods and draw on partnerships across sectors and on growing knowledge generated by the Academy's quality-focussed functions.

As far as available resources allows, it could support statistical capacity development via:

- Identification of priority capacity development activities and opportunities that use the ISI's comparative advantage with partners across and outside the ISI family
- Supporting relevant partners in developing detailed project proposals and budgets
- Establishment of potential routes to funding and using the ISI network in project delivery
- Professional Project and Programme Management, including developing and monitoring Key Performance Indicators (KPIs)
- Enhanced approaches to identifying demand for skills and knowledge transfer

The Academy will support the design, funding, and project management of a portfolio of capacity development projects that:

- draw on the ISI Network
- meet the Academy's core principles, and
- focus on an agreed set of priorities for action in each time period.

Such support can involve direct management by the Academy or by tailoring the type and size of support to individual projects. Suggestions for potential working partners and project-type activities are welcomed from all members of the global statistical and data community. Upscaling existing known successes should be highly valuable in the initial period. But wider and innovative ideas are needed.

Some priorities for 2024 to 2030 are set out in the table below. Proposals for funded projects in most of these areas are being discussed between ISI members and with other various partners.

Potential Academy priority to 2030	Areas where ISI members are developing proposals for funded projects, according to the ISI's comparative advantage
Ethical issues in the use of AI	Building on the work of the ISI's Advisory Board on Ethics, the ISI can use its unique Network to examine, advise, and develop solutions for ethical challenges related to data in the field of Artificial Intelligence. Of particular value would be bringing to bear the long history of official statisticians in dealing with ethical issues in helping other sectors use new types of data for the public good while managing new types of risks.
Regional data communities	Stronger institutional arrangements can provide for better cross-sectoral independent professional networks for statisticians in SE Asia, Africa, Latin America, and the Pacific respectively. Tailored arrangements for specific regions could be highly valuable in for instance: - Providing timely and regionally tailored responses to threats to statistical independence - Cross-sectoral cooperation within and between academic institutions, National Statistical Offices, and other organisations in solving emerging challenges in human resources and other areas In Africa, for example, a detailed proposal is being examined about establishing a

Potential Academy priority to 2030	Areas where ISI members are developing proposals for funded projects, according to the ISI's comparative advantage
	Centre for Building Statistical Data Science Capacity based in Africa that can complement the UN Regional Hub for Data Science in Rwanda, and, separately, for a regional ISI-type body to support African statistical and data professionals more broadly, particularly on support scientific independence of official statistics.
Soft skills	The ISI Network provides significant opportunity for transferring 'soft skills' across and within sectors, in areas such as leadership and communication. These skills are becoming essential skills for statisticians to thrive in the modern data ecosystem.
Statistics and Data Literacy	Options include upscaling the known success and potential of the existing International Statistical Literacy Programme (ISLP)[5]. This could have a major impact in supporting sustainability and prosperity in many parts of the world.
Climate Change	The ISI Network can be used to bring together knowledge across sectors to help resolve statistical issues related to Climate Change and build relevant capacity across sectors.
Mentoring	Existing schemes within professional societies and other initiatives can be supplemented and supported by the ISI, based on its international and regional reach. Support for upscaling successful schemes and the development of new ways of mentoring could be transformative for the sustainability of success of human resources for statistics and data.
Data partnerships	Inter-institutional and cross-sector partnerships, to obtain, process, and use data well, are increasingly important in the modern data ecosystem, not least between National Statistical Offices, other Government agencies, academia, and the private sector. Pilot projects to exemplify, inspire, and inform data partnerships would be useful. The ISI Network can be better leveraged to support and supplement existing work by groups such as the Global Partnership for Sustainable Development Data (GPSDD)

6.4 Integration with external capacity development initiatives

Leveraging synergies and efficiencies with partner organisations is a core principle of the Academy.

Specific mechanisms to help achieve this could include:

1. Involvement of key capacity development agencies in the governance of the Academy (eg as above in the proposed Steering Committee)
2. Mapping all Academy outputs to generating benefits for existing relevant capacity development initiatives at global or regional levels
3. Stakeholder mapping as a key formal stage of project planning
4. Providing an annual report[6] on achievements and forward proposals to the UN Statistical Commission, the Global Partnership for Sustainable Development Data, and others (to be agreed), with such bodies advising on priorities for follow-up work.
5. A communication strategy that develops strong relationships with key institutions
6. Agree mechanisms at regional level for consulting on the Academy's activities – eg via the African (UN) Statistical Commission – including a regional level strategy[7]

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[5] Managed by the ISI Association the International Association for Statistics in Education (IASE)
[6] Approved by the ISI Executive Committee
[7] This may best equate to the UN regional commission geography and other major strategic planning areas like the Pacific Community and language-based communities

6.5 Integration with existing ISI activities

The ISI and its Associations are already involved in a wide range of activities related to capacity development, often provided on a voluntary basis and sometimes at a nominal cost to participants.

The Academy will seek to learn from and up-scale successes from existing activity in the ISI Family. Strong links are therefore required between the Academy and existing ISI Committees and Associations.

The existing **World Statistics Congress, Regional Statistics Congresses**, and possibly new global and local networking-based events will continue to be essential to the effectiveness of the ISI in developing statistical capacity. The Academy can help support strategic approaches to funding them and the events can be used to up-scale the impact of the Academy.

Other existing activities across the ISI family directly or indirectly related to capacity development include the provision of:

- short courses
- academic journals
- webinars
- specialised learning events
- support to women in statistics
- academic prizes, and
- ad hoc scientific advice on issues like ethics and independence.

These make a significant contribution to global capacity development and can support the aims of the Academy. The organic provision of learning between members will continue to be encouraged by the ISI. But such activities can be integrated into projects facilitated by the Academy if there is a business case to do so.

7. Next steps

During 2024, the ISI Permanent Office, Executive Committee, and ISI Capacity Building Committee will work with a wide range of potential funders to establish possible resourcing streams and inputs on the set up of the Academy and the design and delivery of its activities.

The development and confirmation of the Academy medium to long term goals, more detailed business planning, and its Key Performance Indicators (KPIs)/ performance monitoring system will be based on the level of funding achieved and ongoing consultations with ISI members and partners.

Priority steps to for 2024 include:

- Develop the detail of the Academy's quality and project focussed functions, including by identifying:
    - expertise within the ISI Network that can contribute to their development and delivery, and
    - a means of ensuring scientific independence of its outputs
- Start to implement capacity development activities with proven scalable value

- Develop the detail of proposals and resourcing solutions for medium-to-long term Academy-facilitated projects
- Develop KPIs according to emerging resourcing potential
- Enhance the ISI Network and organisational tools available to support Academy priorities
- Deliver existing ISI capacity development via its normal activities
- Deliver an event to foster and promote the Academy and its goals (see below)
- Use existing ISI conferences to promote the Academy and support its goals.

The **World Statistics Congress (WSC) in 2025** is targeted as a point to review lessons and agree longer term objectives and activities for the Academy. In the meantime, a **dedicated networking and learning event around the Academy's priorities** can provide the opportunity to deliver outcomes that support the Academy's strategic priorities.

An 'ISI Academy Congress' (branding to be finalised) by the end of 2024 can provide a platform for promotion and development of the Academy and to optimise its impact. Key features could include discussion and resolution of the key capacity development challenges that the Academy is focussed on. Highly inter-linked thematic discussions could seek to conclude and provide action plans on the final day. This could be facilitated by more workshop type activities during the event, rather than presentation of papers, by more time focussed on discussions, and by Thematic Chairs, supported by a small diverse team, being tasked with managing and concluding on an allocated theme during the conference. There could also be a focus on developing the capacity of participants by equitable distribution of roles and pro-active promoting of opportunities for the professional development of a range of levels of experience, such as age, gender, and country-background.

Annex A – Further rationale for the ISI Academy's quality function

A.1 Introduction

The ISI Academy Strategy sets out that the Academy aims to draw on the comparative advantage of the ISI and the skills and expertise across the ISI Network to provide capacity development services to either:

a) meet unmet demands for capacity development activities or
b) improve the supply of capacity development services in the world of statistics

This Annex provides initial proposals for how the Academy could support improvements and sustained quality in the supply of capacity development services and products provided for and by statisticians and data professionals.

An independent **ISI Academy for capacity development** is proposed that sees statistical capacity development as a professional discipline. While knowledge of data and statistical sciences and their context is a key commodity in capacity development, those involved should be able to apply a range of skills and knowledge which are not exclusive to any statistical sector and are relevant in wider sectors, technical and non-technical, statistical and non-statistical. The Academy could support this via training, tools, and monitoring to improve quality and efficiency according to its comparative advantages. Not least in providing independent professional support in navigating capacity development issues in the complexity and dynamism of modern data ecosystems.

A.2 Key challenges in the supply of capacity development services for statistics for the public good

While there are some efforts under way to resolve them, some of the common key supply-side challenges faced statisticians and data practitioners in developing their capacity include:

1. **Inadequate resourcing**, in terms of the size, accessibility, type, and longevity of commitments to capacity development services.
2. A **complex marketplace** for capacity development services that beneficiaries can find challenging to access and navigate
3. Capacity development **services are often driven by provider** rather than beneficiary priorities
4. Despite regular commitments in principle and the establishing of some organisational arrangements, there is significant scope for improvements in **coordination and efficiency between supplier/ donor organisations**. This is in terms of both delivery mechanisms and fund-raising
5. Modern **data ecosystems require new skills and perspectives** where sustainable success will be based as much on cross-sectoral collaboration and non-traditional skills and perspectives as producing high quality statistics.
6. There is significant scope to address **common delivery challenges** and for providers of capacity development services to be more efficient
7. There is a lack of **common frameworks or international standards** to support the monitoring and management of the quality of capacity development services
8. There is a lack of **global investment in professional development** specifically tailored to professionals providing capacity development products and services in statistics.

A.4 ISI's comparative advantages on quality

The challenges listed above require more rapid and effective solutions, especially as we speed towards 2030 with major data gaps in monitoring the Sustainable Development Goals (SDGs) and given the speed and nature of opportunities and challenges in the modern data ecosystem.

The Academy would be able to help address these challenges by drawing on the wide ISI Network across statistical sectors. Within this, key benefits of an ISI-based approach would be the potential to unblock supply-side barriers by setting up mechanisms which:

1. Focus on professional values independent of governmental, intergovernmental, or other organisational politics or interests
2. Draw on the ISI's and its Associations' global reach, including its ability to muster statistical expertise at a regional level and use relationships with other types of professional bodies where required
3. Draw on a network that together has a wide variety and massive depth of experience in capacity development across sectors, organisations, delivery mechanisms, types of donor etc.

To do this, the Academy would need to develop working partnerships with other relevant global initiatives and organisations. A need would therefore be to map the complementary and comparative advantages of parallel related initiatives.