1. Introduction

This draft outline for a methodological document describing a statistical framework for measuring sustainable tourism has been prepared to stimulate discussion on the potential to integrate international standards and recommendations on:

i. the measurement of tourism, including tourism satellite accounts

ii. the measurement of the environment and its links to economic activity, particularly environmental-economic accounting

iii. the measurement of social and cultural phenomena

iv. the measurement of data at sub-national and location level

v. the use of statistical infrastructure such as business registers to underpin the collection and coherence of data.

Expressed in this dot point fashion the intended ambition may appear unreasonably large. However, in each area there are rich and relevant materials that can be built upon and furthermore, the intention at this point is to consider integration across the complete range of potential information in a staged fashion, i.e. gradually building a more complete framework over time.

Of particular importance in undertaking this work is that the focus for the development of the framework is clear – i.e. the measurement of sustainable tourism. Having a clear focus for use will enable the design of the statistical framework to be effectively targeted and also will help in setting clearer priorities for staging the work. It will be essential to keep in mind the intended use of the statistics during the heavily technical and statistical discussions that will take place in developing the statistical framework.

The work is being undertaken in the context of the UN World Tourism Organization (UNWTO) and UN Statistics Division (UNSD) project: Measuring Sustainable Tourism (MST). This specific paper complements other discussion papers also prepared for the meeting. Those papers have provided a rationale for a broad scope in...
the statistical framework; an initial focus on tourism, economic and environmental aspects of sustainable tourism; the importance of detailed spatial data as well as of statistical infrastructure. The discussion of these other papers will need to inform the direction taken for the methodological document outlined here.

As for other documents of this type, the focus is on describing what should be measured and the relevant context and framework rather than considering how measurement should be undertaken and related issues of implementation. This is not to say that issues of implementation are unimportant, indeed they are significant. It is envisaged that, subject to progress on describing a statistical framework, complementary documents focused on implementation would be developed, again building on existing resources as relevant.

2. Chapters proposed for the Statistical Framework for Sustainable Tourism (SF MST)

Chapter 1: Introduction

This chapter would cover

- Motivation and context for the MST project – sustainable tourism policy, SDGs, destination level statistics, links to other initiatives both statistical and policy related
- Description of the concept of sustainable tourism and summary of past measurement work. Highlight key concepts, policy themes, approaches to indicator development and the need of developing standardized statistical methods for measuring sustainable tourism
- Relevance of a statistical framework and approach to the collection, organization and dissemination of data, including relevance of accounting frameworks particularly TSA and SEEA.
- Key features of the proposed statistical framework, covering
  - Links to sustainable tourism policy requirements
  - Priority areas for measurement
- Primary uses of the SF MST
  - Data organization and data gap analysis
  - Data collection and reporting
  - Derivation of aggregates and indicators
  - Potential for analysis and modeling
    - Extended input-output models and similar
    - Ecological footprint and similar
    - Tourism demand modeling
- Summary of potential applications of statistical framework based outputs to policy questions
  - Sustainable tourism / sustainable development / SDGs
  - Potential policy applications areas, including
    - Water use and water supply for tourism
    - Tourism employment and “green” jobs in tourism
    - Sustainable use of natural environments to support tourism activity and contribution of environmental assets to tourism activity
    - GHG emissions and potential effects of climate change (including transportation)
    - Waste flows from tourism activity
    - Role of eco-tourism
    - Trade-offs with alternative activities: fishing, agriculture
    - Leakages and footprint analysis
Spatial analysis

- Sub-national
- Regional (i.e. aggregation of countries – Caribbean, Mediterranean)

Chapter 2: Overview of the SFMST

This chapter would cover

- Elements of the statistical framework including statistical infrastructure, highlighting the role of accounting frameworks
- Description and use of international statistical standards and frameworks, and other related work
  - International Recommendations for Tourism Statistics
  - SNA
  - TSA
  - SEEA Central Framework and SEEA Experimental Ecosystem Accounting
  - Framework for the Development of Environmental Statistics
  - INRouTe – spatially enabling tourism statistics
  - Others
- Key definitions and concepts
  - Visitors and usual environment
  - Tourism activity – characteristic industries and products
  - Environmental assets, including ecosystems and biodiversity
  - Environmental flows - natural inputs, residual flows
  - Spatial scales, including tourism destinations
- Basic statistical and accounting principles from SNA, TSA, SEEA Central Framework and SEEA Experimental Ecosystem Accounting
  - Economic units and business registers
  - Accounting principles of time of recording, valuation, etc
  - Stocks, with distinct focus on produced and environmental assets, and flows, both monetary and in physical units
  - Quantities, prices and values
- Relevant classifications
- General form of statistical tables and accounts
  - Monetary supply and use tables
  - Flow accounts / Physical supply and use tables
  - Asset accounts
  - Combined presentations
- Spatial areas for measuring sustainable tourism (NB: This is a fundamental issue and may well deserve a chapter it its own right)
Chapter 3: Organisation of data for key statistical domains

For all of the key statistical domains this chapter would present descriptions, definitions, measurement boundaries, classifications, data structures, measurement challenges and possible extensions. Some focus might be placed on data sources. The aim is to provide a means by which data from each domain can be integrated and compared across domains. Proposed domains for inclusion are:

- Visitor movements
- Tourism activity and expenditure
  - Information on main products including output, consumption (including by type of consumer – domestic, international, household, business, type of event), exports, imports
- Tourism characteristic industries
  - Business demographics such as size, ownership, location
  - Information on output, tourism share, value added, capital stock (produced assets – e.g. hotels, transport equipment, etc)
- Tourism employment
- Environmental flows
  - Water and wastewater
  - Energy
  - Solid waste
  - GHG Emissions
- Environmental assets
  - Land use and land cover
  - Extent and condition of natural environments supporting tourism activities (e.g. beaches and coastal areas, marine areas, national parks, rivers and waterways, ski-fields).
  - Air quality, water quality
  - Ecosystem services supporting tourism activity
  - Visitor and tourism impact
- Expenditure on environmental protection and other environmentally related flows (taxes, subsidies, etc)
- Tourism infrastructure (including e.g. walking trails, etc) and capital formation in tourism industries

Specific sections are proposed for special measurement issues, including

- Treatment of transport, especially international/cross border
- Seasonality
- Attribution of environmental flows to visitors
Chapter 4: MST combined presentations, aggregates and indicators for sustainable tourism

This chapter would cover

- Nature and purpose of combined presentations
- Main combined presentations for the assessment of sustainable tourism
- Typology of aggregates and indicators
- Proposals for sustainable tourism indicators (e.g. for SDGs)