III. CSPA 2.0 Business Architecture

40. The definition of Business Architecture being used by CSPA is given below.

“Business Architecture covers all the activities undertaken by a statistical organization, including those undertaken to conceptualize, design, build and maintain information and application assets used in the production of statistical outputs. Business Architecture drives the Information, Application and Technology architectures for a statistical organization.”

41. CSPA focuses on architectural considerations associated with statistical production as bounded by GSBPM. Business concerns such as:

- Ensuring that the corporate work program for a statistical organization best addresses the needs of its external stakeholders, or
- Recruiting, retaining and developing staff with relevant skills

are not central to CSPA. Such concerns are, however, very important considerations in an organization-specific business architecture.

42. Organizations that have formally defined business architecture can reference CSPA when describing aspects of their business architecture which are fundamentally in common with other producers of official statistics.

Describing Statistical Production

43. To enable efficient and consistent documentation and understanding of CSPA three related concepts have been adopted which are relevant for all readers in relation to “Statistical Production”. These are Business Function, Business Process and Business Service.

44. The terms and definitions used in CSPA for these concepts are drawn from GSIM. The terminology and modelling of GSIM aligns with The Open Group Architectural Framework (TOGAF). TOGAF is widely known for defining architectural frameworks.

45. Following is a brief overview of these three concepts, a more detailed discussion of these concepts and statistical production is contained in the CSPA “Describing Statistical Production” document.

Business Function

46. GSIM defines Business Function as something an enterprise does, or needs to do, in order to achieve its objectives. This represents a simpler expression of the definition used in TOGAF.

47. When identifying Business Functions, the emphasis is on an enterprise level ("whole of business") perspective, recognizing that different parts of the business may have different detailed requirements in regard to a particular function. At the level of the Business Function, there is no implementation detail.

Business Process

48. A Business Process is a set of process steps to perform one or more Business Functions to deliver a Statistical Program Cycle. Key aspects include:

- A process consists of a series of steps (activities/tasks)
- There is sequencing (or "flow") between steps
- A business process is undertaken for a particular purpose
- What is represented (for the sake of simplicity and clarity) as a single step in a high level depiction of a process might – when viewed in more detail - comprise a lower level (sub) process consisting of multiple steps

Business Service

49. A Business Service is a means of performing a Business Function. It will support one or more Business Processes. It is the who - or what - will undertake the work associated with each function. Business services should be scoped to support flexible sequencing and configuration of Business Functions within different Business Processes. A Business Service has an explicitly defined interface that requires the knowledge of what the service will deliver (including in what time frame) given a particular set of inputs. A Statistical Service is a kind of Business Service.

Business Architecture Principles

50. Principles are high-level decisions or guidelines that influence the way processes and systems are to be designed, built and governed. Principles are derived from the mission and values of the organization, taking into account the opportunities and threats that the organization faces. In CSPA, principles are used to express the high-level decisions and designs that will shape the future statistical processes and systems.

Decision Principles

51. Decision principles are guidelines to help decide on strategic development. They provide a basis for decision making and informing how a statistical organization sets about fulfilling its mission. They help enable sound investment decisions. The following decision principles support the outcomes sought by the High Level Group and key elements of the United Nations Fundamental Principles for Official Statistics.
52. A number of principles which are common to most organization's business architecture (whether formally defined or not) are being identified through other initiatives such as work within the Statistical Network. The following business architecture decision principles were jointly developed via the Statistical Network business architecture project and the CSPA project:

53. **Principle:** Capitalize on and influence national and international developments
**Statement:** Collaborate nationally and internationally to leverage and influence statistical and technological developments, which support the development of shared statistical services.

54. **Principle:** Deliver enterprise-wide benefits
**Statement:** Design and implement new or improved statistical business processes in a way that maximizes their value at an enterprise level.

55. **Principle:** Increase the value of our statistical assets
**Statement:** Add value to the statistical organization's statistical assets (either directly or indirectly) through improved accessibility and clarity, relevance, coherence and comparability, timeliness and punctuality, accuracy and reliability and interpretability.

56. **Principle:** Maintain community trust and information security
**Statement:** Conduct all levels of business in a manner which build the community's trust. This includes the community's trust and confidence in the statistical organization's decision making and practices and their ability to preserve the integrity, quality, security and confidentiality of the information provided.

57. **Principle:** Maximize the use of existing data/Minimize respondent load
**Statement:** Leverage existing data from all sources (e.g. statistical surveys or administrative records) before collecting it again. Statistical organizations are to choose the source considering quality, timeliness, cost and burden on respondents. Statistical authorities monitor the respondent burden and aim to reduce it over time.

58. **Principle:** Sustain and grow the business
**Statement:** Focus investment and planning on long term sustainability and growth, both in terms of the organization's role and position within its own community as well as internationally.

59. **Principle:** Take a holistic and integrated view
**Statement:** Ensure data, skills, knowledge, methods, processes, standards, frameworks, systems and other resources are consistent, reusable and interoperable across multiple business lines within a statistical organisation.

### Design Principles

60. CSPA aims to support organizations in realizing these decision principles in practice. The Business Architecture design principles have been identified for CSPA in conjunction with the Statistical Network Business Architecture project.

61. **Principle:** Consider all capability elements
**Statement:** Consider all capability elements (e.g. methods, standards, processes, skills, and IT) to ensure the end result is well integrated, measurable, and operationally effective.

62. **Principle:** Re-use existing before designing new
**Statement:** Re-use and leverage existing data, metadata, products and capability elements wherever possible before designing new.

63. **Principle:** Design new for re-use and easy assembly
**Statement:** Design and standardize all new data, metadata, products and capability elements for re-use, so they can be easily assembled and modified to accommodate changing user demands.

64. **Principle:** Processes are metadata driven
**Statement:** Ensure the design, composition, operation and management of business processes, including all input and output interactions, are metadata driven and automated wherever possible.

65. **Principle:** Adopt available standards
**Statement:** Aim to adopt open, industry recognized, and international standards where available. Statistical industry standards such as the Generic Statistics Business Process Model (GSBPM) and the Generic Statistical Information Model (GSIM) are examples of the standards to be used.

66. **Principle:** Designs are output driven
**Statement:** Ensure the whole statistical process is output-driven. Output is the reference starting point; the statistical production process starts from the output desired, that is from required products, and goes backwards, defining the various aspects of the process.

67. **Principle:** Enable discoverability and accessibility
**Statement:** Ensure data, metadata, products and capability elements are discoverable and accessible to achieve the benefits from sharing and reuse.

68. **Principle:** Statistical Services are defined at an appropriate level of granularity
**Statement:** Statistical Services are defined with relevance to the GSBPM sub-process they support.

69. **Principle:** Statistical Services are relevant to the business
**Statement:** Statistical Services are large enough for the business to understand, and are not low-level services used by IT.

70. **Principle:** Statistical Services deliver net business value
**Statement:** Statistical Services deliver sufficient business value to consumers exceeding the cost of integrating them into local environments.

71. **Principle:** Statistical Services have service-level agreements
**Statement:** Statistical Services have an accompanying service-level agreement that defines the performance of the service.

72. The Information and Application architecture design aspects of CSPA are directed by the CSPA Business Architecture design principles.
1. Descriptions are also available via the CSPA Glossary.
2. In 2014, the members of the Statistical Network were the national statistical organisations in Australia, Canada, Italy, New Zealand, Norway, Sweden and the United Kingdom.