Plug and play statistical components – the cornerstone for future proofing Australia's statistical systems

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National statistical offices are facing challenges on a number of fronts. Users of statistical information want better quality data, and they want it faster, at a cheaper price, and in a format that suits their own systems. Providers want easier ways to provide their data so that the burden and cost of providing their information is reduced. At the same time, NSIs are facing reducing budgets and increasing costs. Australia's national statistics office, the Australian Bureau of Statistics, has set out to meet these challenges head-on. Through large scale innovation across the ABS, we are radically transforming the way we acquire, collate, use, reuse and disseminate statistical information. Our aim is to have a 'plug and play' system where statistical processes and technology can be assembled to order with minimal IT involvement. This new world will enable seamless reuse of skills, business processes, services, information and data models, tools and technologies across all collections in the ABS.

The paper will describe our transformation activities. For example, our new enterprise architecture translates our vision and strategy into the change required to move the ABS into the new world. Census, business and household data will be acquired via the web, and our use of large administrative datasets will rapidly increase. Our statistical processes are being reengineered, and all statistical production is being aligning to the international Generic Statistical Business Process Model (GSBPM) and the Generic Statistical Information Model (GSIM). Our new Metadata Registry and Repository will store all metadata (based on international information exchange standards such as SDMX and DDI) in a way that makes it easy to discover and reuse metadata. The new Enterprise Data Warehouse will capture and store all versions of data from raw state, through integration, interpretation and presentation, and will provide user-friendly business intelligence and analysis tools to select, manipulate, aggregate and visualise data. A new Statistical Workflow Management System will automatically orchestrate the processes required to run end-to-end workflow.

The paper will also describe some of the challenges we have encountered along our journey, and will explain how our work could help the international statistical industry to embrace a plug and play culture.

Key words: Transformation; GSIM; GSBPM; assemble-to-order.