

* Higher level competencies are indicated throughout the framework, in blue italics, where appropriate

Helpful – Influences decision making; is influential; is customer focussed	Innovative – Drives innovation; is innovative	Capable – Deploys capability; builds capability of self and others	Efficient – Extracts value from existing data and analysis; works efficiently; enables efficiency to happen	Professional – adheres to statistical frameworks; quality assures work; builds trust
Acquiring data/Understanding customer needs				
<ul style="list-style-type: none"> Works proactively with the customer, shares knowledge and suitability of data sources (administrative, survey or census), outlines the strengths and limitations. Helps the customer, including Policy professionals, to understand the value of a strong evidence base. <i>Influences the design of initiatives to ensure that robust data collection is facilitated (SStO, AS years 2+).</i> <i>Uses knowledge of customer needs to anticipate potential future changes to statistical products (SStO, AS years 2+).</i> 	<ul style="list-style-type: none"> Uses innovative techniques to acquire new data sources, to aid in the delivery of customer needs. Obtains and utilises customer feedback to regularly feed into and direct the development of innovations in own team <i>or across business areas (SStO, AS years 2+).</i> 	<ul style="list-style-type: none"> Is able to create new data solutions/collections through the manipulation of multiple data sources, to better meet customer needs. Applies techniques to link or match data. <i>Recognises where external data sources can be easily integrated with own datasets (SStO, AS years 2+).</i> <i>Designs and commissions new work such as a new survey (SStO, AS years 2+).</i> Builds the capability of others by sharing knowledge about data sources, data manipulation and appropriate innovations within own team <i>or across business areas (SStO, AS years 2+).</i> 	<ul style="list-style-type: none"> Has an in depth knowledge of data sources available in their own, <i>and related areas (SStO, AS years 2+).</i> Maximises the use of existing data sources, where possible. Advises others on the design and management of data collections to meet customer needs (administrative, survey or census), enabling others to work efficiently. 	<ul style="list-style-type: none"> Develops and maintains a reputation with customers and colleagues as the first port of call for professional advice on data sources. Works with integrity and confidence, building trust. <i>This may include working with Ministers and colleagues in the Minister's private office or Press Office (SStO, AS years 2+).</i> Is an advocate for the investigation and use of administrative data.

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Data analysis				
<ul style="list-style-type: none"> Proactively engages early and often with the customer to share analytical results, and to discuss findings, taking data limitations into account. <i>Influences the debate and the decision making process (SStO, AS years 2+).</i> Selects analytical techniques and conducts analysis in such a way as to strengthen customer trust in the evidence base. 	<ul style="list-style-type: none"> Applies knowledge of new and evolving technologies, including open-source software, and has confidence in making decisions around which methods and techniques to apply. <i>Assists others in making these decisions (SStO, AS years 2+).</i> Experiments with innovations, manages and learns from failures and shares lessons learned within, <i>and across teams (SStO, AS years 2+).</i> Drives forward suitable technologies, tools and analytical techniques, leads the way in their application and acts as a main point of contact to ensure effective delivery within, <i>and across teams (SStO, AS years 2+).</i> 	<ul style="list-style-type: none"> Is able to identify and apply the most appropriate analytical method in different situations, knows what the expected outputs would look like and how to interpret findings. <i>Is able to choose the appropriate analytical approaches for whole work streams (SStO, AS years 2+).</i> Actively identifies opportunities to share and build technical knowledge and skills within <i>and across teams (SStO, AS years 2+).</i> 	<ul style="list-style-type: none"> Quickly decides on the most appropriate methods and tools to use to deliver analysis, confidently adapting their approach as required to effectively manipulate a variety of data sources. Has a broad data analysis knowledge base and uses lessons learned from their own work and others' to implement changes to processes and methods which improve practices, <i>and drive efficiency (SStO, AS years 2+).</i> Shares knowledge and recommends appropriate data analysis techniques to those in <i>and/or across team(s) (SStO, AS years 2+)</i>, enabling efficiencies. Confidently manages and organises large datasets in order that they can be easily manipulated by self and/or others. Produces clear and informative documentation on coding, processes and data files to ensure that 	<ul style="list-style-type: none"> Takes responsibility for the delivery of high quality statistical advice and analysis given by self <i>and/or team (SStO, AS years 2+).</i> Uses <i>and promotes (SStO, AS years 2+)</i> appropriate methods to quality assure analytical work, in line with Aqua Book¹ and GSS guidance, to ensure that analysis is fit for purpose. Quality assures others' analytical work, in order to gain insight into methods used, or offer refinements. Is committed to finding new ways to meet customers' needs using appropriate available technologies and evidence, while maintaining sound professional standards (right methodology, right interpretation).

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			<p>knowledge is shared and future analysis can be undertaken speedily by themselves and others, encouraging others to do the same.</p>	
<p><i>Presenting and disseminating data effectively</i></p>				
<ul style="list-style-type: none"> • Produces products that are considerate of the three user personas (Expert Analyst, Information Forager, Inquiring Citizen). Tailors products to the differing needs. • Evaluates products to ensure that they are meeting the needs of different users, and uses information to feed continuous improvement. • Draws out the key/headline messages for the customer and <i>provides insight to inform debate and influence decision making (SStO, AS years 2+)</i>. 	<ul style="list-style-type: none"> • Actively seeks out new and insightful ways to present and visualise statistical data. • <i>Applies new approaches to improve current publications and data visualisations (SStO, AS years 2+)</i>. 	<ul style="list-style-type: none"> • Demonstrates breadth of data presentation and dissemination capability through the application of sound data visualisation and/or statistical commentary techniques. • Is able to embed social media strategies within communications plans for the work area. • <i>Identifies shortcomings in currently used dissemination methods and seeks skills that enable them to fill these gaps (SStO, AS years 2+)</i>. 	<ul style="list-style-type: none"> • Disseminates data in an 'open' format (with clear and appropriate metadata) such that it can be effectively used by colleagues or customers for analysis. • Provides guidance on the appropriate use of imperfect or incomplete data, so that the maximum value is extracted and inappropriate use avoided. 	<ul style="list-style-type: none"> • Identifies advantages and disadvantages of different ways of presenting and visualising data (including different types of chart, colour schemes, use of interactive software) and can justify decisions on data presentation in reference to these and to customer requirements.

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<i>Working with credibility</i>				
<ul style="list-style-type: none"> Builds strong relationships with customers and develops own reputation, <i>as well as that of the team or Department (SStO, AS years 2+)</i>, through strong customer engagement and the continued delivery of customer requirements. Actively seeks to build a diverse network of contacts, strengthening relationships by offering help wherever possible. <i>Begins to use this network to help their current work (SStO, AS years 2+)</i>. 	<ul style="list-style-type: none"> Uses legal frameworks to provide back up in the use of innovative solutions to more complex problems. 	<ul style="list-style-type: none"> Understands the roles that other professionals within <i>and outside the team (SStO, AS years 2+)</i> play. Recognises when the skills and expertise of others within <i>or outside the team (SStO, AS years 2+)</i> is required, and is able to draw on these skills in a productive way. Builds own capability by keeping abreast of new developments. Applies learning to add value in day-to-day work. Builds the capability of others by sharing good practice with own business area <i>and with other analytical and/or Policy colleagues (SStO, AS years 2+)</i>. 	<ul style="list-style-type: none"> Builds own reputation, <i>and that of the team (SStO, AS years 2+)</i>, for working efficiently and/or for finding efficient solutions to statistical problems. <i>Engages widely to ensure that efficiencies are enabled elsewhere (SStO, AS years 2+)</i>. 	<ul style="list-style-type: none"> Understands the legal framework for statistical work, including the Code of Practice for Official Statistics, the relevant pre-release access legislation and the Data Protection Act. Keeps knowledge up to date, expands range and documents all learning within a Continuing Professional Development log book.

ⁱ The Aqua Book was introduced by HM Treasury in 2015; the Book provides guidance for all professions on the production of quality analysis for government.

<https://www.gov.uk/government/publications/the-aqua-book-guidance-on-producing-quality-analysis-for-government>