

# **Technical Framework** 2022

The Government Economic Service (GES) Technical Framework 2022 sets out the high-level technical standards, knowledge and skills required to be a GES Member

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## Introduction

#### Who are economists in Government?

Economists bring an understanding of economic principles and the ability to apply these to policy and operational questions, identifying the right economic concepts and the right level of economic analysis each time. Alongside partners including other analysts and policy colleagues, economists have a key role in ensuring evidence underpins policy development and delivery across government. The ability to clearly communicate technical concepts, ideas and analysis to a broad audience, being well-attuned to needs and decision-making context, is critical.

#### What is the GES Technical Framework?

The Government Economic Service (GES) Technical Framework 2022 sets out the high-level technical standards, knowledge and skills required to be a GES Member. These professional standards set the benchmark for government economists within the UK Civil Service, ensuring quality and establishing consistency across the profession to what we do and how we do it. The contents of this Technical Framework are the result of a programme of research and consultation, developed and delivered throughout 2021, which included focus groups and interviews with members from all grades and departments within the GES. The Technical Framework complements broader departmental and Civil Service career development frameworks and guidance.

The purpose of the revised GES Technical Framework is to:

- Detail the technical standards expected from economists within the Civil Service at each grade.
- Be used by all Departments and external assessors for recruiting to GES posts and for departmental GES promotion and badging boards
- Support GES members to assess their own skills & knowledge gaps against those standards – providing them with a clearer picture of their development needs and the skills & knowledge needed to progress their career in the GES.
- Help non-GES Civil Servants understand the broad professional skills held by the GES members.

#### Who does the GES Technical Framework apply to?

**The GES Technical Framework applies to all GES Members.** This is the technical component of a wider set of professional standards that also apply to all GES Members. This wider set of professional standards are :

- Civil Service Success Profile Behaviours
- Government Functional Standards: Analysis
- GES Technical Framework (this document)
- <u>Government Analysis Career Framework –</u> the GES is just one of many analytical professions that sit within the Analysis Function (part of the Civil Service).
- Government Analysis Function SCS Capability Framework this framework shows the capabilities required at SCS level which also applies to GES members.

#### How should the GES Technical Framework be used?

The GES Technical Framework is broken down into <u>3 core areas</u> of technical competency for GES Members:

- 1. Application of Knowledge
- 2. Analysis of Data
- 3. Effective Communication

For those who come into government through the Economic Assessment Centres (EAC), economics **knowledge** (macro, micro, international and data skills) is fully tested at that point, with the expectation that a successful candidate has the grasp of economics of a good graduate. For those entering government directly at SEO or and above, there needs to be space within the process to test a level of core knowledge.

All knowledge and skills listed under each technical competency of the GES Technical Framework are considered potentially relevant for the role of economists at the respective grades. Where line managers/recruiters are considering applicants suitability for promotion to a higher grade or for those coming from outside the GES, interviewing panels should be conscious that they are appointing someone to a GES job and grade not just a specific role and should therefore test a range of economic knowledge.

Components of each of these three Core Areas of technical competency are listed and defined in the below framework, setting out at a broad level the knowledge and skills required to demonstrate professional proficiency at that level for that Core Area Component.

The framework and its intended use have been specifically designed to reflect the broadbased nature of economics as a subject and profession, and the equally varied nature of economist roles across government departments that this technical framework covers.

In applying the framework it is intended that only a sub-set of Core Area Components will apply to any single GES role and/or recruitment, with recruiters/line managers selecting (and clearly signalling on job advert material) which Core Areas and Core Area Components are relevant to the grade/role/department being recruited to and which will be assessed through recruitment. To clarify, individuals will not be asked to demonstrate experience of all example bullets.

#### Recruitment Best Practice

Hiring managers, line managers or recruiters should already be using the <u>Civil Service Success</u> <u>Profiles</u> to recruit for vacant roles (please note, this GES technical framework relates to the technical aspect within the success profile). In addition, this GES Technical Framework should be used to guide role-specific requirements and questions related to economics during the interview or application/selection process. The descriptors against each core area component give a sense of the level expected. Departments may also choose to assess against specialist areas of application at these levels in specific role recruitment.

It is recommended that ALL line managers and recruiters are up to date with relevant Civil Service Success profiles training (via Civil Service learning) and general recruitment training available

### Career Progression/Promotion/Continuous Professional Development

The GES Technical Framework has been designed as a tool for supporting career development and progression, allowing for the identification of areas of development, knowledge and further experience that would support advancement to the next grade.

The listed skills at each grade are helpful to reflect upon as part of role-specific as well as wider CPD. The GES requires that members spend 100 hours on CPD per year (or pro-rata for part-time working patterns), which should include 50 hours spent on economics knowledge and skills, and 50 hours on building wider Civil Service skills. This includes but is not limited to formal learning. To progress, economists would be assessed against the subsequent grade descriptors, so may wish to review the grade above their own when assessing their skills and reviewing what they need to demonstrate to progress further. They can then fit their CPD around these areas.

## Application of knowledge

	Level 1 - Awareness <sup>1</sup>	Level 2 - Practitioner		Level 3	Level 3 - Expert	
	Apprentice/Placement	HEO	SEO	G7	G6	SCS
Applying economic theory and analysis	Has a clear willingness to learn and apply relevant economic theory and can discuss the limits of theory when it comes to real world application.	<ul> <li>Displays sufficient depth and breadth of understanding of core economics.</li> <li>Has the ability to explain and apply theory from different branches of economics - for example applying behavioural economics to a microeconomic context, applying economic history to macroeconomic / contemporary macroeconomic context etc. Can demonstrate an emergent capability to tailor such theoretical application to their environment (role, departmental context, policy context etc).</li> </ul>	Can explain and apply concepts in intermediate microeconomics and macroeconomics. Is able to demonstrate elements of specialist economics knowledge in a specific field (such as international trade, industrial economics, development economics, public finance) and/or can demonstrate advanced Departmental or rolespecific economic knowledge.	<ul> <li>Can explain and apply a variety of economic tools, techniques, and methods to a range of work/policy areas, making use of relevant economic theory (e.g. international trade, industrial economics, development economics, public finance) to develop/oversee the evidence base for policy development. Must demonstrate this ability across the areas of macroeconomics and microeconomics.</li> <li>Able to scope areas of work identifying objectives, analytical methods, resources required and potential delivery risks.</li> <li>Able to recognise when complementary expertise and collaborative working is required e.g., scientists, other government analytical professions and data specialists.</li> </ul>	<ul> <li>Understands high-level business objectives and strategy to anticipate demands for economic analysis.</li> <li>Oversees and challenges as appropriate the application of economic tools, techniques, and methods to a range of policy areas, making use of deep department-specific economic knowledge.</li> <li>Scopes broad areas of work identifying objectives, analytical methods, resources required and potential delivery risks.</li> <li>Can recognise and digest complementary expertise from e.g., scientists, other social scientists, other government analytical professions, and data specialists.</li> <li>Leads teams to deliver cohesive analytical programmes across professions.</li> </ul>	Uses economic insight to interpret high level strategic challenges.     Co-ordinates and directs analytical resources [or workstreams] to meet departmental and ministerial objectives.     Addresses the challenges of competing priorities for resourcing of economic analysis.

<sup>&</sup>lt;sup>1</sup> Awareness, Practitioner and Expert levels have been introduced to sit alongside grades within this framework (following civil service best practice). This allows greater flexibility when working across multiple frameworks for career progression, and allows for a wider application of this framework across departments with differing grade structures. Please see link (pg 36 for further definitions - Government Analysis Career Framework)

Synthesising the evidence	Displays an ability to assess different methods, data or results being used, and to comment on the appropriateness of these methods.	• Analyses complex information and data, drawing on economic knowledge and applying it to questions of interest for the department, while being aware of the limitations of economic analysis and the available data.	• Analyses and synthesises complex information and data, drawing on economic knowledge and applying it to questions of interest for the department, while being aware of the limitations/risks of economic analysis and the available data. This may include developing detailed knowledge or expertise of a technical area.	• Leads development of analysis and synthesises evidence from a range of data and complex information sources, combining and developing these as appropriate. This will include building an understanding of data sources, measurement techniques and analytical debate relating to specific policy areas and ensuring issues of economic inequality and distribution are considered as required.	• Is accountable and ensures consistency between analytical products delivered across teams. This will include building an understanding of the opportunities and limitations of data sources, measurement techniques and analytical debate relating to specific policy areas and ensuring issues of economic inequality and distribution are considered as required.	• Creates and supports teams that challenge and improve the evidence base, draw on diverse perspectives across professional boundaries and consider economic inequality and redistribution as required.
Deliver economic analysis	Can contribute to an economic project with support.	Works independently on an economic/analytical project.     Escalates analytical issues appropriately.	<ul> <li>Is competent in scoping and leading analytical research design.</li> <li>Can take responsibility for wider analytical projects.</li> </ul>	Uses horizon scanning methodologies to anticipate new trends, opportunities and challenges that may influence outcomes of interest to the customers.  Delivery of high quality analysis to the standards set out in the green, aqua and magenta books.	Uses horizon scanning methodologies to anticipate new trends, opportunities and challenges that may influence outcomes of interest to team/departments/stakeholders.  Leads the delivery, or contributes to delivery, of policy appraisal, impact assessments, evidence-based business cases, and evaluation to the standards set out in the green, aqua and magenta books. This will include engaging with, and bringing in expertise from, other analytical professions as appropriate.	• Leads experts to deliver high quality economic analysis, critically appraising methods in line with best practice guidelines. This also includes developing and adding to best practice where possible.

economist	wider learning and development to support formal learning.	as a professional economist by continuing to seek out training and support that enables confident delivery of the above.	a professional economist by continuing to seek out training, teaching and coaching opportunities as well as promoting economics that enables confident delivery of the above.	relevant academic literature, developments in data science, techniques (e.g. behavioural insights) and contributes to wider debates within the organisation and economic profession.  Operates with credibility in an inclusive way, is accountable for the work of the team(s) (where applicable) and champions the economics profession including volunteering as a GES Assessor as per requirements.  Seeks out mentoring opportunities and/or acts as a mentor (formally or informally) to GES Apprentices, HEOs and SEOs.  Seeks out opportunities to embed D&I learning to enable inclusive approaches.	latest relevant academic literature, developments in data science, techniques (e.g., behavioural insights) and contributes to wider debates within the organisation and economic profession.  Operates with credibility in an inclusive way, is accountable for the work of the team(s) (where applicable) and champions the economics profession. Actively keeps abreast of, and contributes to, relevant economic developments within and outside the Department, including internationally, adopting, and promoting good practice.  Acts as a mentor to GES Apprentices, HEOs SEOs and G7s.	senior management events and leadership training sessions to build capability and influence others. • Acts as a mentor to G6/G7s. • Can lead and coach policy/economic colleagues and Ministers through analysis and support their understanding. • Oversees the development of economists by ensuring training and support is accessible. • Provide highest level QA in line with departmental
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# **Analysis of Data**

	Level 1 - Awareness	Level 2	Level 2 - Practitioner		Level 3 - Expert	
	Apprentice/ Placement	HEO	SEO	G7	G6	SCS
Analysing data	<ul> <li>Understands various statistical techniques and can explain choice of method of analysis.</li> <li>Considers how data being used has been constructed and what impact this might have on the analysis.</li> </ul>	Effectively applies appropriate statistical and spreadsheet software to deliver analysis.     Can determine and apply the appropriate approach from a range of economic and other analytical tools, use judgement where data is incomplete and consider the context.     Seeks input from colleagues/seniors on appropriate data sources and learns to confidently use these.	Reviews, synthesises, and is able to critique and quality assure the analysis of others to ensure it is of high quality.  Provides appropriate challenge to methods and results, and continually evaluates the quality of analysis to ensure that the Department is producing robust economic analysis which can stand up to scrutiny.  Seeks opportunities to review the work of others and to consider its reuse for the benefit of self/team. This may include advising on appropriate data sources.	<ul> <li>Analyses and handles data for the purposes of producing evidence to directly advise decision makers as well as the wider team.</li> <li>Is proactive and innovative in considering how the data / analysis will be used by non-economists, stakeholders, and Ministers.</li> </ul>	Is able to steer and challenge where appropriate the analysis, results and evidence produced to advise decision makers as well as the wider team.	• Is able to identify and interrogate the critical assumptions to understand the strengths and weaknesses of the analysis and the robustness of results and the implications for policy. Is pro-active in communicating these to decision makers.

Quality Assurance and challenging analysis	Is aware of core QA methods of own work and open to peer review and QA from others.	<ul> <li>Provides appropriate challenge to methods and results.</li> <li>Continually develops and evaluates the quality of analysis to ensure that the department is producing robust economic analysis which can stand up to scrutiny.</li> </ul>	Designs Quality     Assurance processes and applies them, following departmental best practice , and drawing on sources of external expertise; critically assesses economic analysis and improves it.      Provides appropriate and proportionate critique and challenge to methods and results, in line with the Aqua book      Continually develops and evaluates the quality of analysis to ensure that the department is producing robust economic analysis which can stand up to scrutiny.	● Ensures that appropriate quality-assurance procedures (see aqua book) for economic models are in place and contributes to their implementation ● Continually develops and evaluates the quality of analysis to ensure that the department is producing robust economic analysis which can stand up to scrutiny. ● Challenges input data and assumptions and interprets output data for the purposes of providing supporting evidence, in line with the Aqua Book.	Leads quality- assurance processes and determines the right level (e.g., team level, unit level, directorate level, external peer review, etc.).  Challenges input data and assumptions and interprets output data for the purposes of providing supporting evidence on a wider array of topics, in line with the Aqua Book.	<ul> <li>Ensures profession approved government wide standards (recruitment, development, promotion) are applied in a structured way and maintained within a positive culture of transparent assurance in the department.</li> <li>Being accountable and signing off on key documents.</li> <li>Provides the highest level of QA in line with departmental processes.</li> </ul>
Advising on data sources	• Learns about data sources and undertakes training to understand the qualities of datasets	Builds     knowledge of data     available in own     work area and     learns the     limitations of these     datasets	Create and quality assure datasets with appropriate rigour.	<ul> <li>Advises colleagues on the most appropriate source, handling and processing of data sets based on best evidence/economic theory_and analysis to form estimates about outcomes of likely policies.</li> </ul>	Advises team colleagues on the most appropriate source, handling, and processing of data sets based on best evidence/economic theory_and identifies when to bring in data experts as necessary.	Influences development     of new data sources to     maintain or improve     analytical capabilities.
Using Economic models to inform analysis	• Acquires knowledge of how models can be used to inform analysis.	Develops ability to run economic models, under supervision.	<ul> <li>Develops a good understanding of how models can inform analysis, and of their limitations.</li> <li>Able to communicate effectively what the model results</li> </ul>	Supervises analysis informed by economic models, assuring all parts of the process (Inputs, Technical Operation, Outputs, Analysis, and Communication	<ul> <li>Ensures that economic models are quality assured, consistent with the principles outlined in the Aqua Book.</li> <li>Can make the case to non-technical stakeholders for how new or existing Economic Modelling /</li> </ul>	<ul> <li>Is accountable for the governance of models, with structured quality assurance and approval processes.</li> <li>Ensures modelling stands up to external scrutiny, engaging across government and beyond.</li> </ul>

			show.	of results).	Estimation / Forecasting could help to inform work, policy and departmental objectives.	
Understanding results, including identifying assumptions, risks and sensitivities	Understands what assumptions have been made and why.	<ul> <li>Applies         <ul> <li>appropriate</li> <li>assumptions to</li> <li>analysis and clearly</li> <li>communicates the</li> <li>rationale and the</li> <li>associated risks.</li> <li>Is able to</li> <li>interpret analytical</li> <li>outputs.</li> </ul> </li> </ul>	<ul> <li>Can evaluate         assumptions made by         self and other.</li> <li>Understands of         impact of assumptions         on results.</li> </ul>	<ul> <li>Identifies         disparities, considers         options to resolve and         recommends.         analytical solutions.         <ul> <li>Ensures that</li></ul></li></ul>	Identifies disparities     with wider context and     where disparities exist,     including with findings from     other teams, challenges with     staff and provides support to     resolve.     Works with teams to     ensure assumptions are     clearly and transparently     presented with results.     Works with teams to     identify key risks and offer     advice and challenge on     sensitivities to test them.	<ul> <li>Ensures key information is distilled for senior and ministerial audiences without loss of rigour.</li> <li>Influences decisions to mitigate key risks, understands sensitivities in advice given.</li> </ul>
Applying econometric knowledge	• Skill not normally expected at grade, but initiative and learning are part of the apprenticeship programme.	<ul> <li>With support,</li> <li>will be able to</li> <li>identify</li> <li>opportunities for</li> <li>econometric</li> <li>analysis and carry</li> <li>it out depending</li> <li>on previous</li> <li>academic training.</li> <li>Will continue</li> <li>to invest in</li> <li>learning within</li> <li>this area.</li> </ul>	Generally well placed to identify opportunities for econometric analysis and carry it out depending on previous academic and work training.	• Where relevant, applies econometric knowledge to fully understand how model inputs are estimated as well as being aware of issues related to model specification and efficiency and how they impact on estimates.	Where relevant, identified opportunities for the team to apply econometric knowledge, including fully understanding how model inputs are estimated as well as being aware of issues related to model specification and efficiency and how they impact on estimates.	Adopts a wider perspective with regards modelling best practice, enables high quality data and systems to perform best practice econometrics where beneficial.
Using technical IT skills	Develops     ability to use     Excel and other     software     packages, is     willing to     continuously     improve skills.	Is comfortable with applying and developing skills with Excel and other relevant software packages.	Develops and applies advanced skills in using Excel and other relevant software packages.	• Ensures self and team have relevant skills and resources to be comfortable using relevant software packages (Excel, and others as used in relevant department	• Ensures team has relevant skills and resources to be comfortable using relevant software packages (Excel, and others as used in relevant department e.g., SPSS, STATA, R, SAS, etc.).	<ul> <li>Ensures economists within departments are adequately resourced with learning software relevant for their roles but also future progression.</li> <li>Actively seeks opportunities for</li> </ul>

	e.g., SPSS, STATA, R, SAS, etc.).	collaboration and for GES members to grow and develop their IT, Digital and Analytical Software experience and skill set.
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## Effective communication

	Level 1 - Awareness	Level 2 -	Practitioner	Level 3	- Expert	
	Apprentice/ Placement	HEO	SEO	G7	G6	SCS
Communicating analytical findings	<ul> <li>Displays an ability to use language (written and oral) which is clear, formal, structured, succinct and addresses the relevant issues.</li> <li>Demonstrates an ability to convey complicated economic concepts in a clear way.</li> </ul>	<ul> <li>Demonstrates an ability to convey complicated economic concepts in a clear and intuitive way.</li> <li>Presents results confidently and clearly, with evidence of applying effective approaches (e.g., regressions, tables, charts, diagrams) to aid understanding.</li> </ul>	<ul> <li>Actively seeks out new, insightful, and more inclusive ways to present and communicate findings.</li> <li>Demonstrates an ability to convey complicated economic concepts very simply and directly, using strong data visualisation techniques.</li> </ul>	Effectively communicates the main findings from economic analysis in an inclusive way, bringing out the depths of analysis to colleagues and stakeholders from different backgrounds, using various written, data visualisation and oral channels.	Effectively and inclusively communicating the strategic implications, trade-offs, and dependencies based on teams' economic analysis, in written and oral format, to colleagues and stakeholders from different backgrounds.	<ul> <li>Communicates inclusively with credibility and authority, conveying relevance and impact of presented evidence without overuse of specialist terminology.</li> <li>Reviews findings and recommendations of analytical work with senior officials and Ministers, communicating risks.</li> <li>Is able to convince Ministers on policy and economic implications of analysis.</li> </ul>
Building relationships	Demonstrates a high level of professional integrity when working with customers and data users, developing trust in an inclusive way.	Works effectively in teams and with others, maintaining effective professional working relationships both internally and externally across organisations.	Demonstrates an ability to bring together a team to work on an analytical project and seek input from a diverse range of people.	Builds relationships with senior colleagues to understand evidence needs, and with the analytical community to gather input and feedback on analysis and evidence development.	<ul> <li>Builds relationships with senior colleagues to understand needs and convey key messages, including engaging with the wider analytical community to understand links between team's analysis to others.</li> <li>Is able to identify and</li> </ul>	Builds,     maintains and     engages with a     strong network of     expert economists,     drawing on this to     lead economists and     economic analysis in     home department.

Communicating to technical and non-technical audience	Is expected to familiarise oneself with different methods of communication.	Clearly communicates economic principles and concepts to non-economists.	Clearly communicates economic principles and concepts to non-economists; present trade-offs and uncertainties and articulate these clearly; frames advice, drawing on knowledge of stakeholders' positions, for maximum impact.	Communicates with non-economists with credibility and authority, conveying the relevance and implications of economic concepts without the use of specialist terminology.     Is able to tailor the details when communicating economic concepts and evidence, ensuring that it is appropriate to the needs of specialists and non-specialist audiences.	appreciate where the team has gaps in expertise, and then proactively builds relationships address them.  Communicates with non-economists with credibility and authority, conveying the relevance and implications of economic concepts without the use of specialist terminology. Contributes to events and conferences to educate and inspire as credible economics team leaders. Is able to prioritise details and communicate the most relevant ones effectively in a timely manner, ensuring that the needs of all audiences are	Is visible and shares skills and experience with analytical and wider community in department and across government (e.g., GES assessor).  Contributes to events and conferences to educate and inspire and be seen as a credible economics leader.
Conveying analysis and wider context to key stakeholders and customers, including senior officials and Ministers	Is expected to familiarise oneself with key stakeholders and their requirements (e.g. 2-page preferences of some Ministers, etc).	Drafts analysis for different stakeholders and understands the differences in communicating to them.	Builds relationships to influence policy and operational colleagues.     Demonstrates awareness of wider socioeconomic and political contexts that might impact and influence the appropriate policy response.	Builds on effective relationships and communication to influence policy and operational colleagues, to ensure key findings, caveats and risks from analysis are communicated to senior officials and ministers.     Demonstrates full awareness of and sensitivity to the wider socioeconomic and political contexts that might impact and influence the appropriate policy response within and across own projects.	considered.  Builds on effective relationships and communication to influence policy and operational colleagues, to ensure key findings, caveats and risks from analysis are communicated to and understood and appropriately used by senior officials and ministers.  Demonstrates full awareness of and sensitivity to the wider socioeconomic and political contexts that might impact and influence the appropriate policy response within and across work programmes.	<ul> <li>Delivers         confident and         engaging         presentations of the         analytical work to a         wide audience, both         internal and         external.         <ul> <li>Able to distil             and convey the key             insights from             economic analysis to             senior officials and             ministers.</li> <li>Communicates             clearly and             passionately the             power of analysis             and can influence             widely.</li> </ul> </li> </ul>



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