Competency Set – Technologists

Task-Focused Competencies

Breadth and Depth of Technical Knowledge and Expertise

<u>Definition</u>: The Technologist demonstrates a depth of technical knowledge and expertise and the capability to deploy a wider range or breadth of applications. He/she will be seen by others as a subject knowledge expert who can contribute to the development of new experimental approaches and methods.

Elements:

- Depth of specialist knowledge.
- Breadth of applications.
- Contribution to the development of technology and methods.

Behavioural Anchors:

- Demonstrates subject knowledge expertise in technology and experimental methodologies.
- Demonstrates the ability to deploy technical expertise across a wide range of application areas.
- Makes an effective contribution to the development of new methods or approaches within Teagasc.
- Is referred to by others as a source of expert knowledge or advice.
- Adds value to research design and protocol development.
- Makes comprehensive proposals reference the specification and sourcing of technology and equipment.
- Liaises effectively with other technical agencies and centres of excellence.

Commercial Awareness

<u>Definition</u>: The Technologist must appreciate the commercial context and implications of his/her work. He/she should be able to adopt a more commercially aware mind-set particularly when looking at the application of new technology and methods.

Elements:

- Understanding the commercial aspects of the service.
- Awareness of the commercial potential of technology and methods.
- Competitive sourcing of plant and equipment.

- Understands the commercial factors at play in providing a service.
- Accurately deploys commercial analysis and evaluation methods.
- Identifies and addresses the critical factors that will maximise the commercial viability of the service.
- Identifies new growth opportunities by tracking market developments and trends.
- Sources equipment and materials in a commercially advantageous way.
- Works to achieve a commercial result from the deployment of equipment and methods.

Innovation and Opportunity Development

<u>Definition:</u> The Technologist makes a contribution to the development of new methods and new approaches. He/she should demonstrate an ability to identify opportunities and exploit them to develop the service.

Elements:

- Keeping up to date with best practice and relevant industry/sector issues.
- Thinking broadly to formulate opportunities.

Behavioural Anchors:

- Looks out for and applies good practices and models from elsewhere.
- Scans the environment for new opportunities.
- Thinks laterally, brings original and innovative ides and frameworks to bear on issues.
- Develops scenarios and models options to evaluate possibilities.
- Identifies new areas of opportunity for the deployment of methods and processes.
- Questions the status quo and asks how things can be done differently and better.
- Critically evaluates the current service to identify gaps and come up with improved processes.

Resource Management

<u>Definition:</u> The Technologist should adopt the most effective and efficient approach to achieving results within the resource allocation available.

Elements:

- Being resourceful in achieving the optimisation of equipment and resource use.
- Costing and profiling resource requirements accurately.
- Managing and controlling resources efficiently.

- Makes the best use of the resources available.
- Is innovative and resourceful in finding solutions to funding problems.
- Demonstrates a high value and cost benefit in his work.
- Justifies resources usage in a transparent way.
- Costs complex project activities in an accurate and effective way.
- Keeps a close rein on the cost profile of projects.
- Demonstrates efficiencies in resource usage.
- Builds teams with the right skills for the job.

Higher Level Analysis, Formulation and Interpretation

<u>Definition:</u> The Technologist should add value to the experimental and research process by the rigour of their analysis and critical evaluation. They should also put results and findings into a broader frame of reference.

Elements:

- Higher level analysis and synthesis of data.
- Critical evaluation of information and conclusions.
- Putting results within a wider evaluation framework.

- Analyses information in a systematic and methodical manner to reach conclusions.
- Critically evaluates, tests and questions data (rather than accept it at face value).
- Quickly identifies the core results and conclusions within complex scientific data.
- Critically assesses and evaluates methods and tools.
- Integrates information for a range of sources to derive clear conclusions.
- Estimates the confidence level in their results (whilst appreciating some margin of error exists).
- Identifies patterns and trends within experimental situations and extrapolates on these to forecast accurately.
- Maps the root causes and consequences behind complex problems.
- Quickly evaluates information outside of own immediate area of expertise to make logical and accurate judgements (as to relevance etc).

Interpersonal Competencies

Giving Visible Leadership

<u>Definition:</u> The Technologist should develop a well worked out sense of clarity and purpose about the technology development agenda. He/she should be able to highlight the potential benefits of applications and convey a sense of enthusiasm about the possibilities.

Elements:

- Having clarity about the direction for the technology agenda.
- Highlighting the benefits and value of research technologies.
- Giving clarity and guidance to others on the direction forward.

Behavioural Anchors:

- Develops a clear and coherent view [vision] for how the technology services can make the most impact & add most value to the organisation and the business plan.
- Communicates a clear and compelling view of how the service can add value.
- Identifies the current critical and priority development challenges for the service.
- Gives colleagues in the field a clear perspective on the critical technical issues to be addressed and the methods and tools to go about this.
- Champions the development and applications of emerging research technologies in a way that elicits support and buy-in from others.
- Gives a clear example to others by how he/she prioritises and focuses his/her contribution areas.
- Maximises his/her availability to support technical and other staff in the laboratory & the field.
- Represents the organisation authoritatively and credibly with outside organisations.

Higher Level Presentation and Communication Skills

<u>Definition:</u> The Technologist must be able to convey a sophisticated technical message in a manner that is accessible and informative to a wide range of audiences.

Elements:

- Credibility and poise in communicating.
- Ability to convey technical content in an accessible manner to a wide range of audiences.

- Communicates with a high level of authority and credibility.
- Gets complex technical information across in a clear, accurate and concise way.
- Gives talks and presentations that capture the attention of their audience.
- Is comfortable and skilful in managing an audience.
- Adapts approach or style to match the audience response.
- Communicates effectively through a variety of media.
- Coaches and supports technical and other colleagues in how to present specialist technical content effectively.

Influencing, Persuasiveness and Organisational Awareness

<u>Definition:</u> The Technologist must interact effectively with a wide range of colleagues and stakeholders to make an effective contribution. He/she needs to be able to negotiate, influence and persuade others to achieve the required levels of collaboration and cooperation.

Elements:

- Influencing and persuasion skills.
- Effective negotiation to achieve mutual gains.

Behavioural Anchors:

- Influences others to cooperate and collaborate with development initiatives and projects.
- Persuades others to follow a particular course of action.
- Lobbies effectively to get sufficient resources to run programs, projects and activities.
- Negotiates skilfully with other agencies to get their cooperation and backing for development initiatives.
- Works out win win approaches and solutions with other parties who are involved in the field.
- Finds common ground to accommodate the different agendas and concerns of colleagues and internal departments.

Building Collaboration and Synergy

<u>Definition:</u> Builds a network of professional and industry contacts externally. Seeks to build a culture of collaboration internally by developing own internal network and encouraging own team to co-operate with others.

Elements:

- Building collaborative networks.
- Providing support and sharing information.
- Managing conflict positively.

- Proactively develops collaborative working relationships with a wide range of colleagues within the organisation.
- Proactively builds up team work and collaboration with research and education colleagues.
- Looks out for opportunities to provide assistance, back-up and support to colleagues in other areas.
- Builds a close and effective team-working ethos with technicians and researcher teams by emphasising the common objectives and goals shared by all.
- Shows genuine confidence in and respect for colleagues.
- Actively looks for the contribution and views of colleagues and creates opportunities to swap notes and provide mutual support with colleagues.
- Identifies tension and conflict in working relationships and looks to resolve this in a positive way.

Managing for Results and Quality

<u>Definition:</u> The Technologist must make an effective contribution and give strong guidance to others on the standards and process excellence of the services delivered. He/she should constantly strive to uphold and enhance standards in all core operating areas.

Elements:

- Setting standards.
- Monitoring adherence to standards.
- Promoting a service ethos.

- Sets high and explicit standards for all main work areas, activities and core processes.
- Demonstrates a strong competence in formal quality control systems and methods (e.g. ISO 9,000, SOPs, Technical Q.A Systems etc).
- Educates and informs staff about the rationale and benefits for adopting a strong quality assurance approaches.
- Is thorough and detail conscious in how he/she inspects for quality and compliance.
- Intervenes incisively to address shortfalls in quality or service levels.
- Comes up with initiatives to improve the quality of service in core activity areas.
- Strongly emphasises and promotes a customer service ethos.
- Leads by example in following up on and resolving customer or quality issues.
- Actively seeks feedback from customers and responds appropriately to it.

Personal Qualities Competencies

Driving Change

<u>Definition:</u> Gives a clear positive message that change is essential and promotes innovation and new thinking within the business. Will not countenance the preservation of the status quo.

Elements:

- Giving strong leadership on the change agenda.
- Facilitating an effective change process.
- Promotion of innovation and service improvement.

- Anticipates and tries to understand how the ongoing changes in Teagasc may impact on their area.
- Adopts a realistic but positive view of change.
- Promotes and encourages positive attitude towards change by highlighting the opportunities and potential benefits.
- Keeps colleagues and other stakeholders informed about change issues.
- Works collaboratively with colleagues to make change work.
- Ensures that agreed changes are implemented in an orderly and timely way.