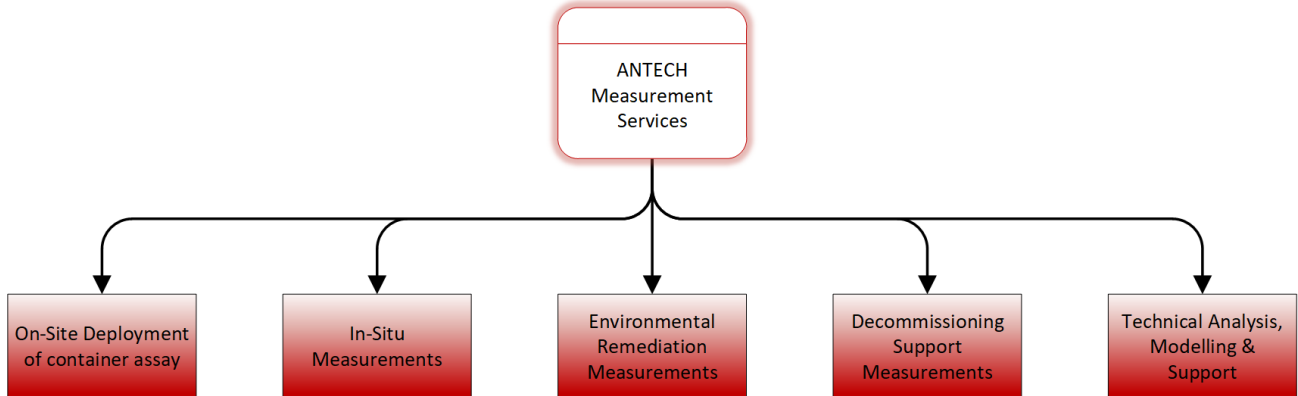


## ANTECH Measurement Services - Overview

ANTECH offers a variety of measurement services to the nuclear industry, ranging from the assay of small samples up to large boxes and containers. ANTECH measurement services offer high accuracy, precision measurements and technical analysis, building on over 30 years of supplying equipment and services to the nuclear industry across the globe. ANTECH Measurement Services include:



- **On Site Deployment** of drum and box assay systems, delivering high performance assay equipment to site without the need for procurement or investment in large machines.
- **In-situ Measurements** of containers with portable assay equipment.
- **Environmental Remediation Measurements** for TENORM and land reclamation.
- **Decommissioning Support Measurements** utilising dose and activity gamma cameras to support localised identification and removal.
- **Technical Analysis, Modelling & Support** provided through ANTECH Subject Matter Experts to support decommissioning and assay campaigns.

### Quality Assurance

Quality assurance is of paramount importance in all aspects of Measurement Services, particularly in the nuclear industry. ANTECH understands this, and strives to provide a service that can provide assurance to the end user in the quality of not only the measurement results, but equally as importantly the measurement processes. ANTECH's quality management system (known as 'AIMS') provides a distinct set of processes and controls for the provision of measurement services.

The ANTECH Measurement Services processes, and the derived Measurement Instructions which form a keystone of the service, have been assessed by UKAS, with accreditation having been awarded for the assay of bulk 'dumpy' bags and 200L drums using a variety of ANTECH equipment. All measurements are carried out in compliance with these processes, with audits and internal quality control checks for customer assurance.

### Quality Assurance Checks:

- Pre-deployment calibration and calibration verification measurements on the detection system.
- Pre-Deployment Equipment inspection and Pre-Deployment Checklist
- Quality Control Measurements across the range of energies.
- Quality Assurance Review of all measurement reports prior to submission for compliance. Including report sign off.
- Spot audit checks on services processes and compliance with AIMS.

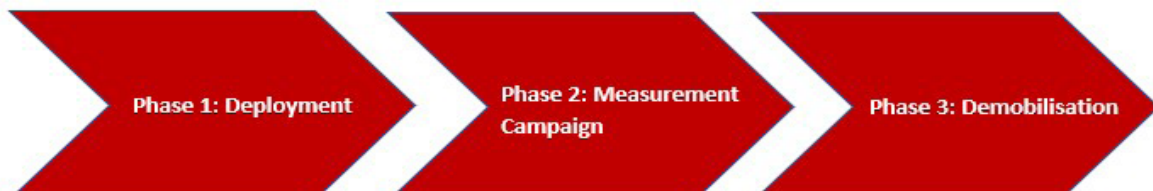


## Measurement Services Phases

The delivery of ANTECH Services are typically split into three phases;

- **Phase 1 - Deployment**, during which ANTECH works pro-actively with the end user to provide a safe and successful deployment of the equipment to the end user site. During this phase, necessary work instructions, risk assessments and method statements are reviewed and processed. Once in place, ANTECH delivers the system safely to the site in compliance with site rules and processes. Once deployed, any commissioning
- **Phase 2 - Measurement Campaign**, during which the ANTECH team carry out measurements on the system. Throughout this phase, ANTECH subject matter experts (SME) provide technical reviews of the measurements, and the ANTECH quality assurance team ensure the quality and compliance of the measurements with the ANTECH QA processes.
- **Phase 3 - Demobilisation and Project Close Out**, during which any outstanding measurement reports are submitted, any questioned results discussed with the end user, and any necessary documentation for the removal of the equipment completed. The equipment is removed from the end user site and the service is concluded.

As part of the final phase of the project, ANTECH always carry out a thorough debrief with the client, to ensure that all requirements have been met and any issues or concerns have been allayed. ANTECH believe a proactive, collaborative partnership with the end user is critical for the successful completion of a project and to ensure that both parties have their expectations met.



## System Delivery

In order to meet the varying requirements of the end users and the sites in which services happen, ANTECH has adopted a flexible approach for system delivery. This includes;

- Delivery of drum and box assay systems in ISO-freight containers for simple and quick deployment on site. In this case the equipment can be located out of doors, and just requires power supplies
- Rugged, portable assay equipment on mobile assay trolleys (for example the ANTCart, shown below) and portable drum turntables.
- Excavator mounted equipment for site remediation.
- Wireless gamma cameras and battery powered equipment for remote operation.

Through the flexible approach to delivering services to site, ANTECH can provide the optimum solution no matter what the situation.



## Sample Sizes

ANTECH Measurements Services can be carried out on a range sample sizes, from small, Marinelli-type beakers to large boxes. ANTECH has equipment for all typical waste containers; beakers, drums, ISO containers etc. The versatility in ANTECH's equipment allows for simple adaptation to the measurement challenge presented.

ANTECH can also carry out sample measurements from environmental remediation sites, scaling up to an excavator bucket in it's EMBASSY assay system and tray measurement systems.