

BNMS No.	Data Acquisition	Comments
3.11.4	Specify the range of mA.	Low mA gives low dose transmission scan. High mA gives good diagnostic quality.
3.11.4	Specify the range of scan rotation time.	Speed at which CT scans volume.
3.11.4	Specify the number of rows of detectors.	More detectors give thinner slices.
3.11.4	Specify the range of pitch values.	Ratio of couch movement to slice width. Affects volume imaged, dose and z-axis resolution.
3.11.4	Specify the maximum continuous scan time (seconds)	Affects how much can be imaged in one scan.
	Is CT easily upgradeable to have more slices?	Very important – some CT scanners easily upgradeable, others can't be upgraded.
3.11.20	What is the maximum imaged FOV?	
3.11.20	Is software available to give an approx. of the image outside the FOV?	
3.11.8	What test phantoms are provided for the CT and SPECT/CT registration?	Need to have image quality phantom (with clear water) to perform uniformity measurements.

BNMS No.	Data Acquisition System	Comments
4.7.3	Is there software supplied for routine QC?	
	Is the same imaging table used for CT and SPECT acquisitions?	
	State the performance parameters of the CT as determined according to the methods specified by Topic Group Report 32 part III and IPEM Report 77, e.g. High contrast axial resolution using standard reconstruction parameters. Low contrast detectability using standard reconstruction parameters.	
	Describe the scout/scan projection capabilities.	
	What archive options are available?	MOD is standard. Recommend DVD or CD. DVD is best as CD won't hold much data.
	Specify the lifetime and an indication of cost of replacement for all critical components of the scanner, e.g. x-ray tube and detectors.	Tube usually lasts 2 years and cost £20000 to replace.
	Does CT have helical (spiral) capability?	
	Can CT scanner be used for the following: <ul style="list-style-type: none"> • Real-time fluoroscopy? • Work with a contrast injector? • Bone mineral densitometry? • Cardiac CT and gated CT work? 	Applications that might be useful in the future.
	What is the time from start of data acquisition to display of 30 th image of series.	Standard parameter.
	Is there simultaneous scanning and reconstruction?	
	Can you set multiple parameters? If so, specify.	
	Can you re-do reconstruction from raw data?	Data is usually automatically reconstructed and displayed for radiographers.
	Is there a raw data storage facility?	Raw data not always stored.
	Can raw data be archived?	
	Is there 3D volume rendering?	New feature on CT scanners.

BNMS No.	Patient Database Management and Data Transfer	Comments
	Will it work with the Trust HIS/RIS system?	
	Does it have work list management?	
	Can it use modality performed procedure steps?	Do PACS and acquisition systems talk to each other?
	How is the patient dose data stored?	Standard measurement is dose length product.
	Where is patient dose data stored?	e.g. DICOM header file
	Will there be co-operation of the manufacturer in enabling medical images to be transferred onto existing and future PACs systems in the trust and other imaging networks?	
	Is DICOM used to transfer data to PACS systems and independent workstations? If so, what version of DICOM is used?	Should be DICOM 3

BNMS No.	Training and servicing	Comments
	What applications training are given?	
	How are software updates implemented?	
	What are the servicing option packages?	Usually lots of different packages available to include % system up-time, and inclusion of parts etc.