



# International Nuclear Services

# Radioactive Packaging Spares Management

*Control of Spares Procurement, Issue and Use  
by International Nuclear Services Ltd*

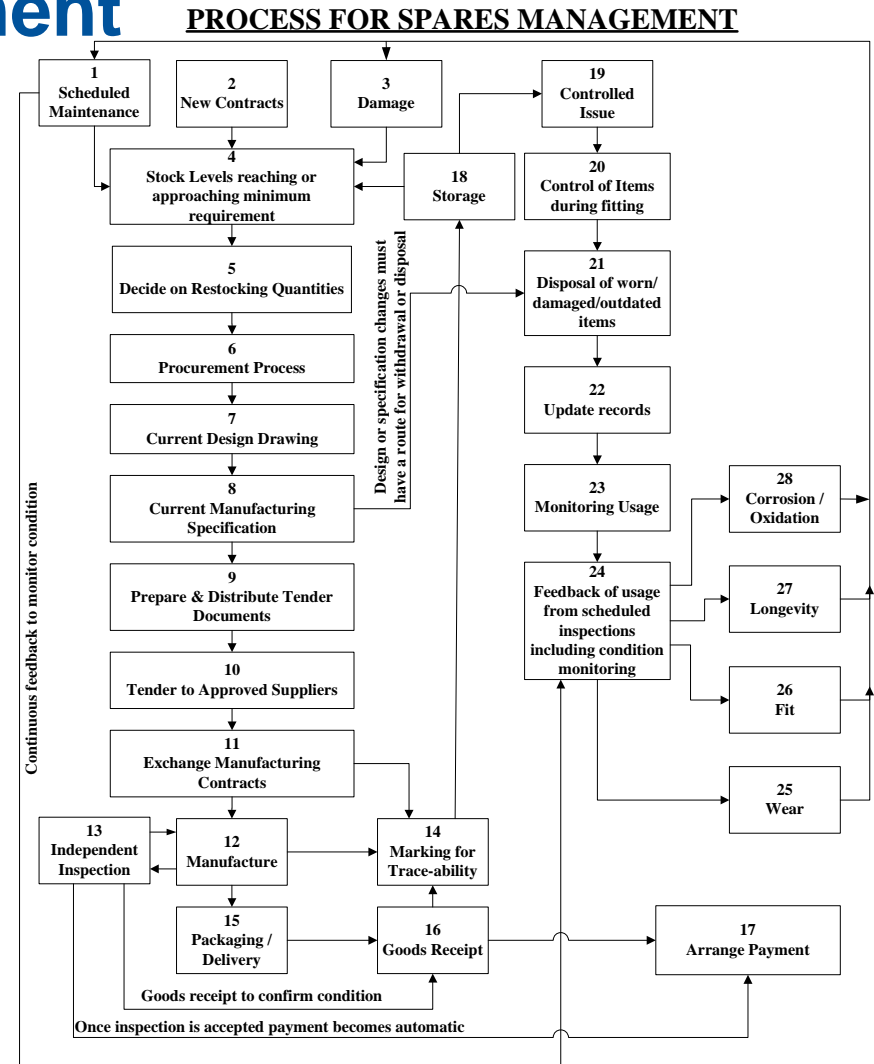
PATRAM Conference Oct 2010



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Nuclear Services

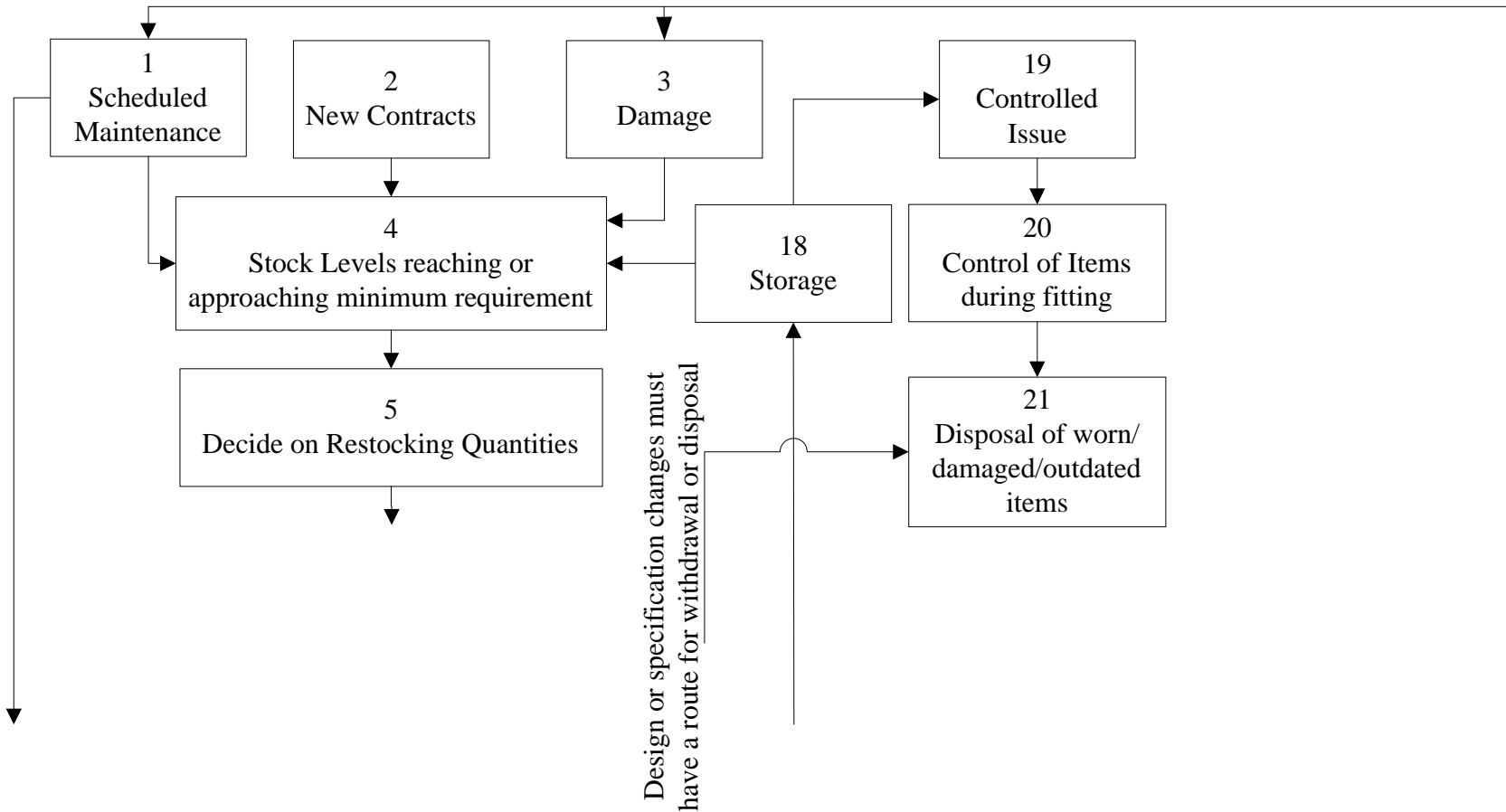
# Process for Spares Management

Although the process appears complicated, in general it flows in a loop so that it is possible to continually monitor and thus 'control' the spares.



# Process for Spares Management

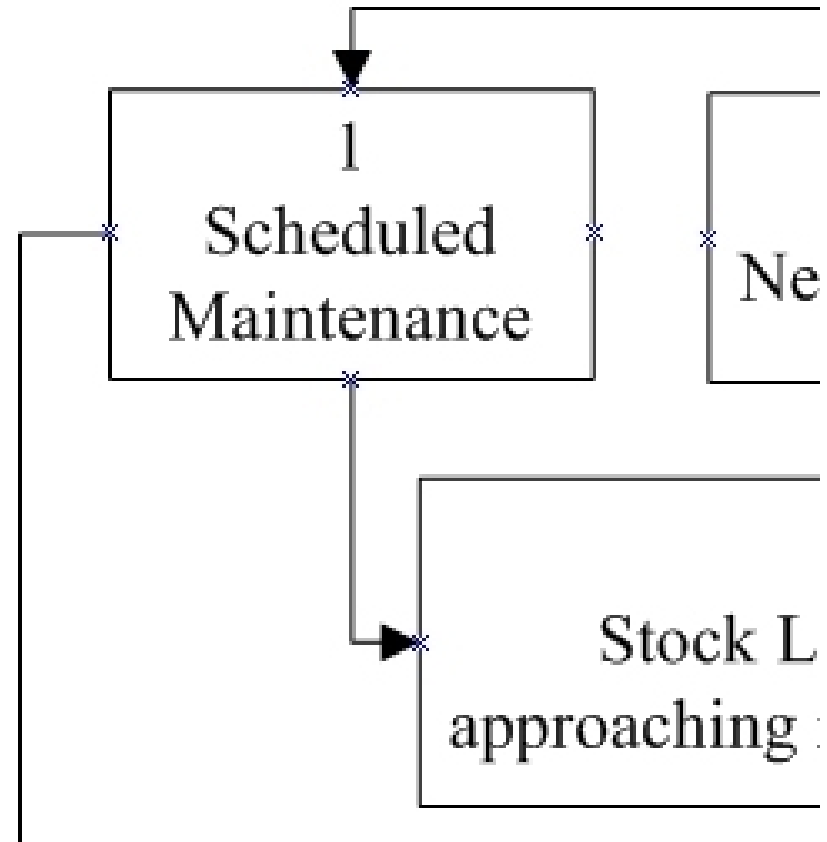
## PROCESS FOR SPARES MANAGEMENT



# PROCESS FOR SPARES MANAGEMENT

## 1. Scheduled Maintenance

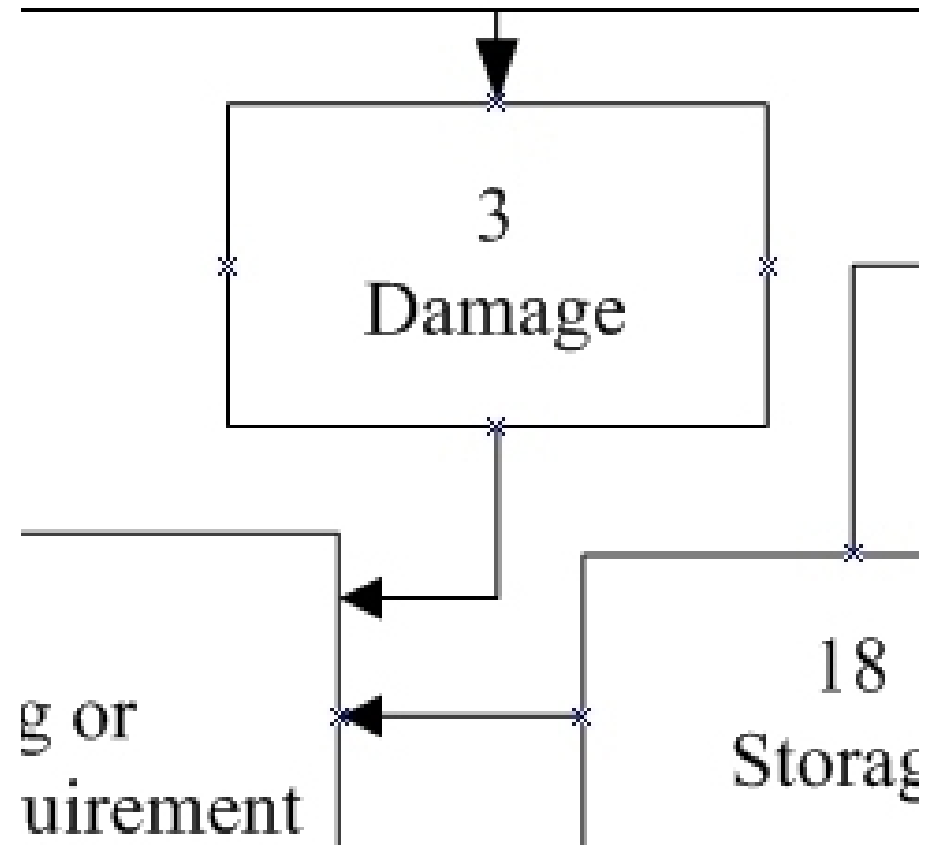
- Turnround
  - Every Trip
- Annual
- Major
- Periodic
  - Can vary with time or usage



# PROCESS FOR SPARES MANAGEMENT

## 3. Damage

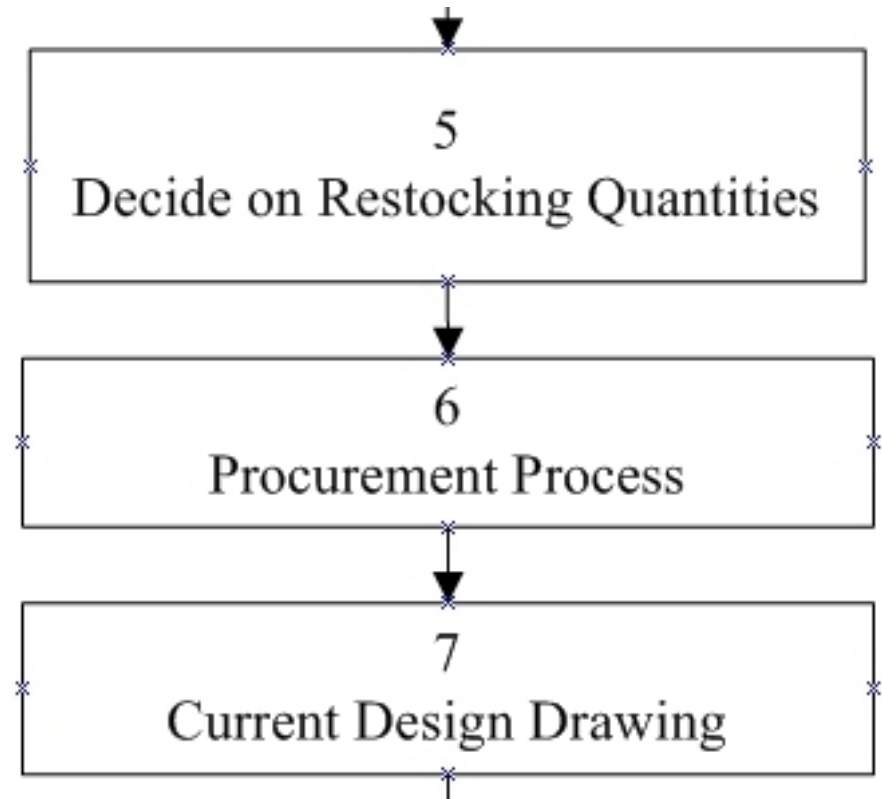
Damage is something that despite all efforts to avoid can happen, so for replaceable components it's important to build in a spares contingency.



# PROCESS FOR SPARES MANAGEMENT

## 5. Decide on Restocking Quantities

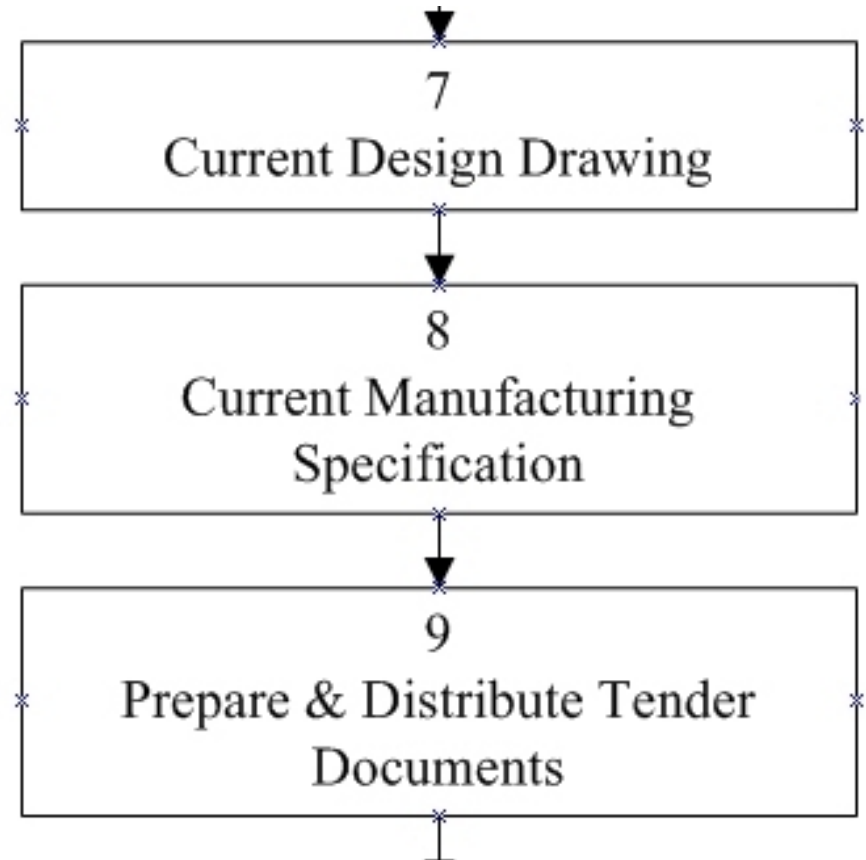
A balance between immediate need and sensible order quantities need to be determined, as well as new contracts which have to be accounted for.



# PROCESS FOR SPARES MANAGEMENT

## 6. Procurement

Procurement is probably one of the most important areas of spares management since getting this wrong will have a major impact on operations.

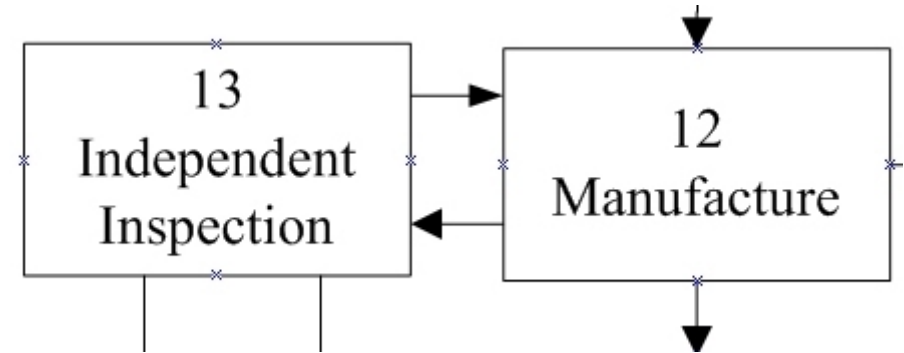




# PROCESS FOR SPARES MANAGEMENT

## 13. Independent Inspection

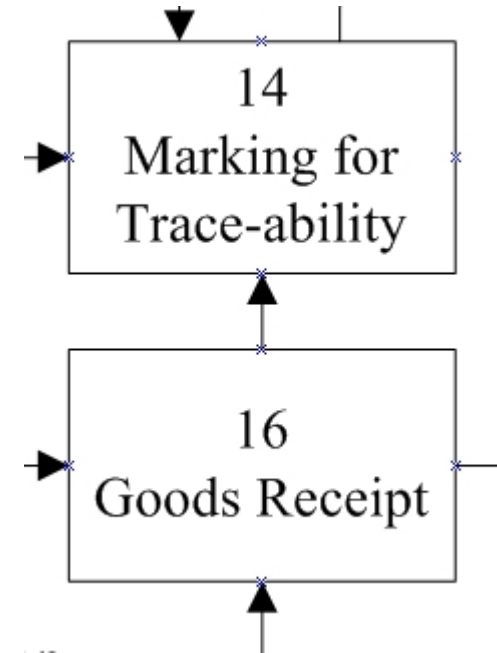
Many items used on radioactive packages require some form of inspection independent of the supplier to ensure the goods meet all the requirements.



# PROCESS FOR SPARES MANAGEMENT

## 14. Marking for Trace-ability

Trace-ability of spares is important for radioactive packages. This ensures that throughout an items life cycle its provenance is all the time known.



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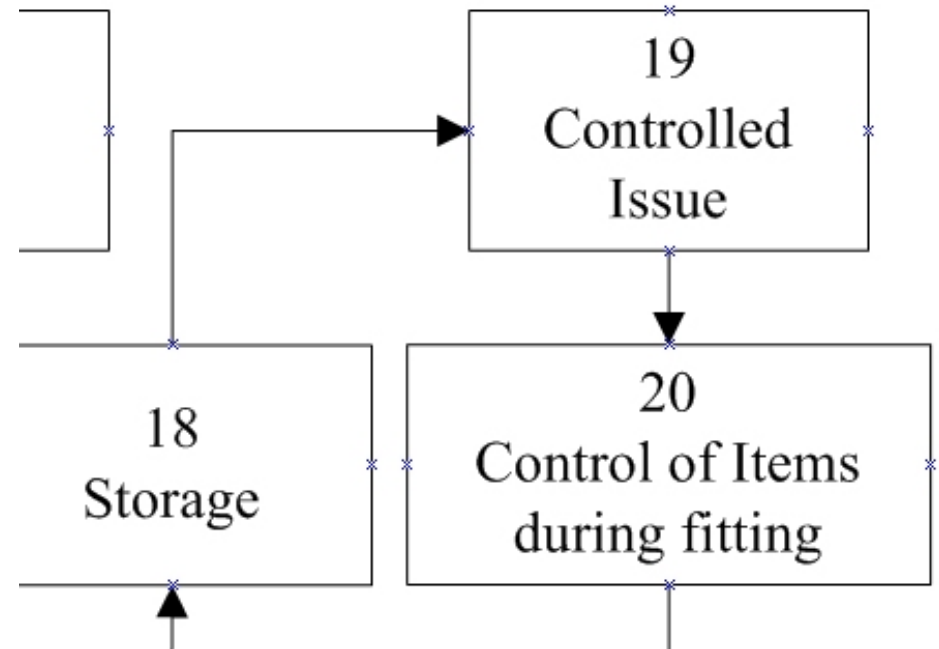


# PROCESS FOR SPARES MANAGEMENT

18. Storage

19. Controlled Issue

20. Control of Items during fitting

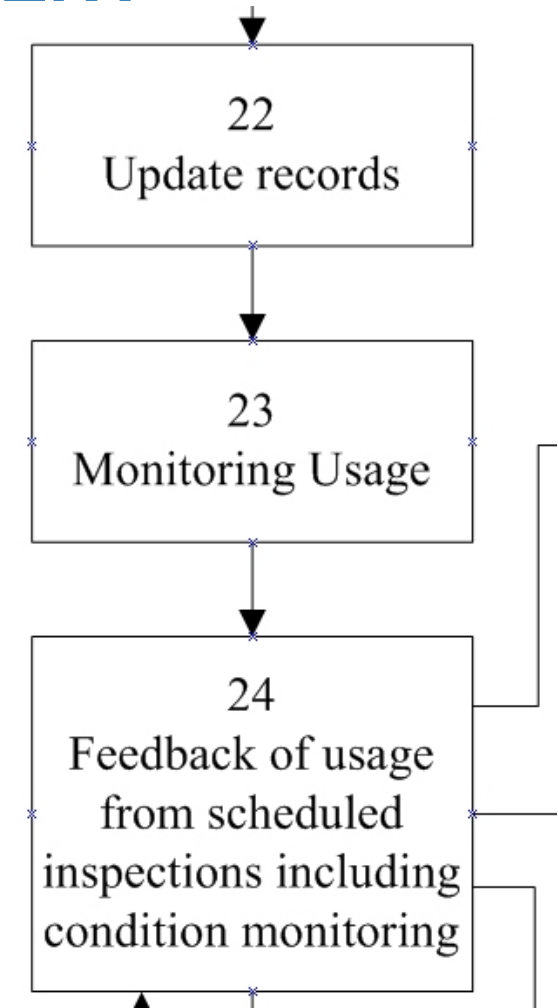


# PROCESS FOR SPARES MANAGEMENT

**22. Update Records**

**23. Monitoring Usage**

**24. Feedback of usage.....**



# Conclusion

- Spare parts are a core part of Operations
- Their procurement storage and control of issue is paramount in maintaining a radioactive packagings compliance with its Design Approval
- INS ensure that all regulatory requirements are complied with by careful attention to detail and procedure and primarily by involving its Flask Operations Engineers all through the Process.

