



Health Care Technical Service

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PPP- Questionnaire

Hospital		Date of revision	
Location	Beds	HCTS Technician	
Status		Last Tanesco bill	

Please go through following questionnaire always according with the person in charge, the local technician and the zonal workshop!
Important: Trough all power protection actions the actual hospital situation of power supply must NOT be deteriorated!

1. People

Person	Name	Degree	Contact
Person in charge			
1st technician			
2nd technician			
3rd technician			
Zonal Workshop			

Responsibilities

Responsible for	Name	Degree	Contact
Maintenance ¹			
Electrical equipment ¹			
Carpentry			
Generator			
- Fuel			
- Switch over (at night)			
Computers			

¹ also in charge to sustain the contact in case of new equipment, breaks, changes in infrastructure

2. Inventory machines/ equipment and check of the electrical installations

- Check every item whether the equipment is too old or too rotten to be protected
- List equipment in machine inventory card
- Fill in machine card for each equipment protected

A) General Electrical Installation

A1) Inventory

Fuse box/ fuses in good condition?	
How fused?	
Fuse box has an earth rod?	
Earth?	
Circuit brake disconnects?	
Earth leaking breaker?	
Three phase current: connected right (1/2/3)?	
Three phase current: current of every line with full load?	
Sum: total current:	
Voltage L1-N, L2-N, L3-N	
Single line fuse- how many amps fused?	
problems with lightning strike?	
is there an underground wiring for lightning protection?	
Cut off switch installation acceptable	

A2) Conclusion

Items to replace/ renew?	
Lines to replace/ renew?	

Fuses to replace/ renew?			
Sockets to replace/ renew?			
Earth renew?			
Circuit breaker renew?			
Which lines have to be protected?			
Which equipment has to be protected and with what?			
Power backup existent?	yes/ no	if yes what kind of?	is it necessary?
Theatre			
Oxygen concentrator			
If necessary and not existent: installing of a self made or readymade ups			
General/ other			

B) Theatre:
B1) 1st Theatre

Equipment	manufacturer	name	serial nr	current/ watts	voltage	service manual	existing protection (backup)	vital/ essential/ life protecting
Operation lamp							(backup)	
Sucker								
Anesthetic equipment								
Diagnostic equipment								
Diathermy								

B2) 2nd Theatre

Equipment	manufacturer	name	serial nr	current/ watts	voltage	service manual	existing protection (backup)	vital/ essential/ life protecting
Operation lamp								
Sucker								
Anesthetic equipment								
Diagnostic equipment								
Diathermy								

B3) 3rd Theatre

Equipment	manufacturer	name	serial nr	current/ watts	voltage	service manual	existing protection (backup)	vital/ essential/ life protecting
Operation lamp								
Sucker								
Anesthetic equipment								
Diagnostic equipment								
Diathermy								

C) Sterilization/ Laundry/ High Current Equipment over 2000W

Equipment	manufacturer	name	serial nr	current/ watts	voltage	service manual	existing protection	vital/ essential/ life protecting
Autoclave								
Separate plugged		Possible to separate		How fused				
Washing machine								
Separate plugged		Possible to separate		How fused				
Dryer								
Separate plugged		Possible to separate		How fused				
Separate plugged		Possible to separate		How fused				

D) Laboratory

Equipment	manufacturer	name	serial nr	current/ watts	voltage	service manual	existing protection	vital/ essential/ life protecting
Microscope								
Photometer								
Centrifuge								
Incubator								
Refrigerator								
Microscope								
Photometer								

E) Radiology

Equipment	manufacturer	name	serial nr	current/ watts	voltage	service manual	existing protection	vital/ essential/ life protecting
X- ray							(
Ultrasound								

F) Maternity/ Mother Child Clinic (MCH)

Equipment	manufacturer	name	serial nr	current/ watts	voltage	service manual	existing protection	vital/ essential/ life protecting
Oxygen concentrator								

Equipment	manufacturer	name	serial nr	current/ watts	voltage	service manual	existing protection	vital/ essential/ life protecting
Fridge								
Sucker								

G) Dental Ward

Equipment	manufacturer	name	serial nr	current/ watts	voltage	service manual	existing protection	vital/ essential/ life protecting

H) Communication

Equipment	How many	current/ watts	voltage	existing protection	
Telephone					
Fax					
Radio call					
Computer					
Printer					
Copy machine					
Sum					

I) Generator/ emergency current supply/ general
H1) Inventory

Equipment	manufacturer	name	serial nr	current Phase 1,2,3	voltage L1-N, L2-N, L3-N	persons using eq	service manual available	frequency	existing protection
Generator #01									
Generator #02									

H2) Electrical installation (possibly the drawing of a plan is necessary)

Subject	
Change over switch?	
Auto/ manual switch?	
If manual why not automatic?	
Switches when ? (o/u current or power cut)	
Automatisation possible?	

Subject	Yes	No
Fuse box/ fuses in good condition?		
Fuse box has an earth rod?		
Earth?		
Circuit brake disconnects?		
Earth leaking breaker?		

H3) Emergency current supply

how is emergency current provided?	
separate lines for emergency current?	
which equipment is connected?	
battery backup?	
solar power available? (number and size of panels, current, number and size of batteries)	
hydropower available?	

J) Other (e.g. named by the technician)

Department	Equipment	manufacturer	name	serial nr	current/ watts	voltage	service manual	existing protection	vital/ essential/ life protecting

3. Workshop

Quality of the equipment (tools, spare parts etc.) in the hospital/ workshop:	
Skill of the technician:	
Possible candidates for the HCTS teaching:	

4. History/ outlook/ donors

Short history of former maintenance/ power problems as:	
lightning strikes	
o/u voltage	
power cuts	
peaks	
what kind of fluctuations	
constant o/u voltage	
what equipment often breaks	
Short outlook of projects planned/ still to come:	
Donors:	
Talk to donors when expenses for single hospital are to high	

