## Posts and Telecommunications Department, MoTC

C.	Description of Equipment	Otro
Sr.	(Technical Details)	Qty.
1	Fixed Monitoring Station (FMS), Type I	
	Direction Finding (DF) Processor/Receiver(s) VHF/UHF	
	- DF Processor model 5095, included DF receiver(Downconverter)	
	- TDOA and Hybrid geolocation that combines Angle of Arrival (AOA)	3 Sets
	and/or TDOA measurements.	3 Sets
	- IF real time bandwidth up to 40MHz	
	GPS based precision frequency reference.	
	- Integrated inside DF processor	
2	DF antennas for VHF and UHF, including RF lines and Switches, Vertical &	
	Horizontal Polarization	
	- DF and Monitoring from 20MHz up to 8000MHz. Dual polarization	
	Receive antennas, including RF lines and Switches, VHF/UHF/SHF,	3 Sets
	Vertical Polarization, Passive, OMNI.	
	- Integrated inside the antenna	
3	Receive antennas for HF, including RF lines and Switches, Vertical	
	Polarization, Passive, OMNI.	3 Sets
	Active Monopole Antenna, 9 kHz - 30 MHz	
1	Passive Directional log-periodic receive antennas in the VHF/UHF bands,	
	including RF and control lines and switches	3 Sets
	- Frequency range from 30MHz to 3000MHz	
	requency range from 30W112 to 3000W112	
5	Remote controlled antenna rotator for vertical and horizontal rotations.	
		3 Sets
6	Monitoring Receiver / Analyzer HF/VHF/UHF/SHF.	
	Downconverter	
	- Will be integrated inside DF processor included:	3 Sets
	VHF/UHF Downconverter Sample channel	3 SCIS
	VHF/UHF Downconverter REF channel	
7		
	- Included router and modem for IP based network	3 Sets
	Cisco: 4-port 10-/100-Mbps managed switch	
8	Steel material to install Monitoring tower.	2.5
	50m tower on grounded base with fencing	3 Sets
	6	

9	Racks, cabling and accessories.	
	- 19" rack for equipment installation	3 Sets
	- 7/8" RFS feeder cable for DF/Monitoring antenna	
	- Control cable for DF/Monitoring antenna	
	- RF jumper cable, accessories for completing the system installation	
10 Grounding and lightning-arrester subsystem.		
	- Lightning rod for DF/Monitoring antenna	3 Sets
	- Grounding kit for 7/8" Feeder cable and Control cable	
	- Lightning arrester for all inside equipment	
11	GPS Unit	
	- Integrated inside DF processor	3 Sets
	- handheld GPS Garmin etrex20i	
	Spec: 65K color TFT	
	2x AA baterry	
	weight: 141g (with battery)	
12	Client Spectrum Monitoring software/workstation	
	Workstation: Aberdeen Workstation	3 Sets
	- 2U, 19" rack mount workstation	
	- INTEL CORE I7-4790K 4GHz 8MB 88W LGA1150 CPU RETAI	3 300
	- Client Spectrum Monitorin Software included Vector Signal Analysis	
13	1U19" LCD Rackmount( Include Keyboard and Touchpad);	3 Sets