Myanmar

THE GOVERNMENT OF THE UNION OF MYANMAR MINISTRY OF COMMUNICATIONS, POSTS AND TELEGRAPHS POSTS AND TELECOMMUNICATIONS DEPARTMENT

Ref: 217-PTD/3-G/0/3/ Date: 27 January 2000

To

ITU-D Study Gorups Secretariat Telecommunication Development Bureau Fax: +41 227305484

Fm:

Director General Posts and Telecommunications Department Yangon, Myanmar Fax: +95 1 286365

COURRIER BDT

27 JAN. 2000

576

Subject:

Questionnaire on national radio frequency spectrum management to seek information needed for responding to Resolution 9 of the World Telecommunication Development conference (WTDC-98 valleta)

Reference: Administrative Circular CA/08, Date 2.11.99

Dear Sir.

With reference to your letter, the questionnaire concerning national radio frequency spectrum management duly completed by this administration is herewith forwarded for necessary action.

With best regards,

(KYI THAN) **Director General**

Posts and Telecommunications Department

FOCAL POINT REGARDING CORRESPONDENCE ON THIS QUESTIONNAIRE (PARTS I AND II)

1.	Mr./Ms		
		Family Name	First Name
2.	Country _	MYANMAR (UNION OF)	
3.	Name of th	ne Administration/Organization Pos	S & TELECOMMUNICATIONS DEPARTMENT (PTD)
4.	Title	DIRECTOR GENERAL	
5.	Address	125, Ground Floor, Pansodan St.,	YANGON (RGN) MYANMAR (BRM)
6.	Tel.: + 95	1 280024 Fax: + 95 1 286365 E-N	Mail: DG.PTD @ mtpt 400.stems.com

To be returned no later than 31 Ianuary 2000 to Telecommunication Development Bureau
Fax: +41 22 730 54 84
E-Mail: devsg2@itu.int

Part 1
Section IV -able of Frequency Allocations (extract from the RR, 1998)

27.5-47 MHz

	Read only	To be comp	leted	
	Allocation to services			
Region 1	Region 2	Region 3	National Altocation	Remarks
27.5-28	METEOROLOGICAL AIDS FIXED MOBILE	· · · · · · · · · · · · · · · · · · ·	METEOROLOGICAL AIDS FIXED MOBILE	
28-29.7	AMATEUR AMATEUR-SATELLITE		FIXED MOBILE	
29.7-30.005	MOBILE		FIXED MOBILE	
30.005-30.01	SPACE OPERATION (satellite identificat FIXED MOBILE SPACE RESEARCH	ion)	FIXED MOBILE	
30.01-37.5	FIXED MOBILE		FIXED MOBILE	
37.5-38.25	FIXED MOBILE Radio astronomy S5.149		FIXED MOBILE	
38.25-39.986	FIXED MOBILE		FIXED MOBILE	
39.986-40.02	FIXED MOBILE Space research		FIXED MOBILE	
40.02-40.98	FIXED MOBILE S5.150		FIXED MOBILE	

		Part I		10
	Read only		The com	pleted
Allocation to services				
Region 1	Region 2	Region 3	National Allocatio	Remarks
40.98-41.015	FIXED MOBILE		FIXED MOBILE	
	Space research S5.160 S5.161			
11.015-44	FIXED MOBILE S5.160 S5.161		FIXED MOBILE	
14-47	FIXED MOBILE S5.162 S5.162A		FIXED MOBILE	

. 4	7-7	75	2	R.	4	K	ı.	

47-68	47-50	47-50	FIXED	
BROADCASTING	FIXED	FIXED	MOBILE	į
	MOBILE	MOBILE		
ĺ		BROADCASTING		
	50-54	•	FIXED	
	AMATEUR		MOBILE	
	S5.166 S5.167 S5.168	\$5.170		
	54-68	54-68	FIXED	
	BROADCASTING	FIXED	MOBILE	
	Fixed	MOBILE		
	Mobile	BROADCASTING		
S5.162A S5.163 S5.164 S5.165				
S5.169 S5.171	S5.172		ł	

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Read only			To be completed		
	Allocation to services		1		
Region 1	Region 2	Region 3	National Allocation	Remarks	
68-74.8 FIXED MOBILE except aeronautical mobile	68-72 BROADCASTING Fixed Mobile S5.173 72-73 FIXED MOBILE 73-74.6 RADIO ASTRONOMY S5.178 74.6-74.8	68-1.8 FIXD MOILE	FIXED MOBILE		
S5.149 S5.174 S5.175 S5.177 S5.179	FIXED MOBILE	S5.19 S5,176 S5,179			
74.8-75.2	AERONAUTICAL RADIONAVI S5.180 S5.181		aeronautical RADIONAVIGATION		

		75.2-137.175 MHz		
	Read only	To be con	npleted	
	Allocation to services			
Region 1	Region 2	Region 3	National Allocation	Remarks
5.2-87.5 IXED IOBILE except aeronautical mobile 5.175 S5.179 S5.184 S5.187	75.2-75.4 FIXED MOBILE S5.179 75.4-76 FIXED MOBILE 76-88 BROADCASTING Fixed Mobile	75.4-87 FIXED MOBILE S5.149 S5.182 S5.183 S5.188 87-100 FIXED MOBILE	FIXED MOBILE FIXED MOBILE BROADCASTING	
ROADCASTING S.190 B0-108	S5.185 88-100 BROADCASTING BROADCASTING	BROADCASTING	BROADCASTING	
18-117.975 17.975-137	S5.192 S5.194 AERONAUTICAL RADIONAVIGA S5.197 AERONAUTICAL MOBILE (R)	TION	aeronautical RADIONAVIGATION	
	S5.111 S5.198 S5.199 S5.200 S5.20 S5.203B	01 S5,202 S5,203 S5,203A	FIXED MOBILE	

Read only		To be com	pleted	
Allocation to services				
Region 1 Region 2 Region 3			National Allocation	Remarks
37-137.025	METEOROLOGICAL-SATELLITE (sace-to-Earth) MOBILE-SATELLITE (space-to-Earth S5.208A S5.209 SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile (R) S5.204 S5.205 S5.206 S5.207 S5.20		FIXED MOBILE axcept aeronautical Mobile(R)	
37.025-137.175			FIXED MOBILE axcept aeronautical Mobile(R)	
	1	37.175-148 MHz		
37.175-137.825	SPACE OPERATION (space-to-Earth: METEOROLOGICAL-SATELLITE (pace-to-MOBILE-SATELLITE (space-to-Earth) SS. SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile (R SS.204 SS.205 SS.206 SS.207 SS.28	•	FIXED MOBILE axcept aeronautical Mobile(R)	

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		Part I		14	
	Read only	To be	completed		
	Allocation to services				
Region 1	Region 2	Region 3	National Allocation	Remarks	
137.825-138	SPACE OPERATION (space-to-Earth METEOROLOGICAL-SATELLITE SPACE RESEARCH (space-to-Earth Fixed Mobile-satellite (space-to-Earth) S5. Mobile except aeronautical mobile (R S5.204 S5.205 S5.206 S5.207 S5.2	(space-to-Earth)) 208A S5.209 8)	FIXED MOBILE axcept aeronautical Mobile(R)		
138-143.6 AERONAUTICAL MOBILE (OR) S5.210 S5.211 S5.212 S5.214	138-143.6 FIXED MOBILE RADIOLOCATION Space research (space-to-Earth)	138-143.6 FIXED MOBILE Space research (space-to-Earth) S5.207 S5.213	FIXED MOBILE	-	
143.6-143.65 AERONAUTICAL MOBILE (OR) SPACE RESEARCH (space-to-Earth) S5.211 S5.212 S5.214	143.6-143.65 FIXED MOBILE RADIOLOCATION SPACE RESEARCH (space-to-Earth)	143.6-143.65 FIXED MOBILE SPACE RESEARCH (space-to-Earth) S5.207 S5.213			
143.65-144 AERONAUTICAL MOBILE (OR) S5.210 S5.211 S5.212 S5.214	FIXED MOBILE RADIOLOCATION Space research (space-to-Earth)	143.65-144 FIXED MOBILE Space research (space-to-Earth) S5.207 S5.213	FIXED MOBILE		
	AMATEUR SS.120 AMATEUR-SATELLITE SS.216		FIXED MOBILE		

Myanmar

		Part I		15	
·	Read only		To be com	pleted	
	Allocation to services				
Region 1	Region 2	Region 3	National Allocation	Remarks	
146-148	146-148	146-148	FIXED		
FIXED	AMATEUR	AMATEUR	MOBILE		
MOBILE except aeronatical		FIXED	METEOROLOGICAL AIDS		
mobile (R)	Ì	MOBILE		Ť	
	S5.217	S5.217			
148-149.9	148-149.9		FIXED		
FIXED	FIXED	•	MOBILE		
MOBILE except aeronatical	MOBILE	•	MODIZE		
mobile (R)	MOBILE-SATELLITE (E	arth-to-space) S5.209			
MOBILE-SATELLITE (Earth-to-space) S5.29					
S5.218 S5.219 S5.221	S5.218 S5.219 S5.221				
149.9-150.05 MOBILE-SATELLITE (Earth-to-sp		pace) \$5,209 \$5,224A	FIXED		
. 15.5	RADIONAVIGATION-SATELLIT		MOBILE		
	\$5.220 \$5.222 \$5.223	·	MOBILE		
150.05-153	150.05-156.7625				
FIXED	FIXED		FIXED		
MOBILE except aeronatical	MOBILE		MOBILE	·	
mobile					
RADIO ASTRONOMI					
\$5.149					
		•			
153-154					
FIXED					
MOBILE except aeronatical		e e			
mobile (R) Meteorological Aids	}		1		
Meteorological Alus					

Allocation (eservices Regio 2 S5.225 S5.26 S5.227	Region 3	National Allocation FIXED MOBILE	Remarks
	Region 3	FIXED	Remarks
S5 225 S5.26 S5.227		,	
S5 225 S5.26 S5.227		,	
<u></u>	n:		· ·
MARITIME MOBIL: (distress and ca S5.111 S5.226	aiting)		
156.8375-174 FIXED MOBILE S5 226 S5 30 S5 231 S5.2	32	FIXED MOBILE	
174-216 BROADCASTING Fixed Mobile S5.234	174-223 FIXED MOBILE BROADCASTING	FIXED MOBILE	
FIXED MARITIME MOBLE Radiolocation S5.31 S5.242	S5 233 S5.238 S5.240 S5.245		
	S5.226 S5.20 S5.231 S5.2 174-216 BROADCASTING Fixed Mobile S5.234 216-220 FIXED MARITIME MOBLE Radiolocation S5.31	S5.226 S5.20 S5.231 S5.232	S5.226 S5.20 S5.231 S5.232

220-335,4 MHz

		220-335.4 MHz			
	Read only			mpled	
location to services					
Region 1	Region 2	Region 3	National Allocation	Remarks	
	220-225			residente de la sur la composició de la	
223-30 BRODCASTING Fixed Mobile	AMATEUR FIXED MOBILE Radiolocation \$5.241	223-230 FIXED MOBILE BROADCASTING	FIXED MOBILE		
	225-235 FIXED MOBILE	AERONAUTICAL RADIONAVIGATION Radiolocation			
S5.24 S5.246 S5.247		\$5.250			
230-35 FIXED MOELE		230-235 FIXED MOBILE AERONAUTICAL RADIONAVIGATION			
S5.24 S5.251 S5.252		S5.250			
235-57 FIXED MOBILE \$5.111 \$5.199 \$5.252 \$5.254 \$5.256			FIXED MOBILE		
267-72	FIXED MOBILE Space operation (space-to-Earth S5.254 S5.257)	FIXED MOBILE		
272-73	SPACE OPERATION (space-to- FIXED MOBILE S5.254	Earth)	FIXED MOBILE		

Reaconty Allocationto services			To be completed	
273-312	FIXED MOBILE S5.254		FIXED MOBILE	
312-315	FIXED MOBILE Mobile-satellite (Erth-to-space) S5.254 S5.255			
315-322	FIXED MOBILE S5.254		FIXED MOBILE	
322-328.6	FIXED MOBILE RADIO ASTRONOMY S5.149			
328,6-335.4	AERONAUTICALRADIONAVIO S5.258 S5.259	GATION		

335.4-410 MHz

335.4-387	FIXED	FIVED	
	MOBILE	FIXED MOBILE	
	S5.254	WOBIEE	
387-390	FIXED	FIXED	
	MOBILE	MOBILE	
	Mobile-satellite (spice to-Earth) S5.208A S5.254 S5.255		
300-309.9	FIXED	FIXED	
	MOBILE	MOBILE	
	\$5.254		

		Part I		19	
	Read only	<u> </u>	To be compl	eted	
	Allocation to services				
Region 1	Region 2	Region 3	National Allocation	Remarks	
399.9-400.05	MOBILE-SATELLITE (Earth-to-space) S:				
	RADIONAVIGATION-SATELLITE \$5.2	22 S5.224B S5.260			
	\$5.220				
400.05-400.15	STANDARD FREQUENCY AND TIME S SATELLITE (400.1 MHz)	IGNAL-			
	S5.261 S5.262				
400.15-401	METEOROLOGICAL AIDS		ALETE OPOL COLON, AND A		
	METEOROLOGICAL-SATELLITE (space-to-Earth)		METEOROLOGICAL AIDS		
	MOBILE-SATELLITE (space-to-Earth) S5	.208A S5.209			
	SPACE RESEARCH (space-to-Earth) S5.263				
	Space operation (space-to-Earth)			•	
	\$5.262 \$5.264				
401-402	METEOROLOGICAL AIDS				
	SPACE OPERATION (space-to-Earth)				
	EARTH EXPLORATION-SATELLITE (Ea	- ·		•	
	METEOROLOGICAL-SATELLITE (Earth-	-to-space)			
	Fixed				
·	Mobile except aeronautical mobile			•	
402-403	METEOROLOGICAL AIDS				
	EARTH EXPLORATION-SATELLITE (Ea				
	METEOROLOGICAL-SATELLITE (Earth-	to-space)			
•	Fixed	•			
	Mobile except aeronautical mobile		·		
103-406	METEOROLOGICAL AIDS				
	Fixed	:	METEOROLOGICAL AIDS		
	Mobile except aeronautical mobile				
106-406.1	MOBILE-SATELLITE (Earth-to-space)			~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	
	S5.266 S5.267	• •			

	Read only		To be con	pleted
Allocation to services				
Region 1	Region 2	Region 3	National Affocation	Remarks
4061-410	FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY S5.149	·	FIXED MOBILE axcept aeronautical MOBILE	

410-470 MHz

41(-420	FIXED	FIXED	
41(-420	MOBILE except aeronautical mobile	MOBILE	
	SPACE RESEARCH (space-to-space) \$5,268	WO INCL	
421430	FIXED MOBILE except aeronautical mobile Radiolocation S5.269 S5.270 S5.271	FIXED MOBILE	
43:440	430-440		
ANATEUR	RADIOLOCATION	FIXED MOBILE	
RADIOLOCATION	Amateur		
\$5138 \$5.271 \$5.272 \$5.273 \$5274 \$5.275 \$5.276 \$5.277 \$5280 \$5.281 \$5.282 \$5.283	S5.271 S5.276 S5.277 S5.278 S5.279 S5.281 S5.282		
40-450	FIXED	FIXED	
	MOBILE except aeronautical mobile	MOBILE	,
	Radiolocation	1	•
	\$5.269 \$5.270 \$5.271 \$5.284 \$5.285 \$5.286		
4:0-455	FIXED	FIXED	
	MOBILE	MOBILE	
	\$5,209 \$5,271 \$5,286 \$5,286A \$5,286B \$5,286C \$5,286D \$5,286E		

Read only			To be completed	
	Allocation to services			
Region 1	Region 2	Egion 3	National Allocation	Remarks
455-456 FIXED MOBILE S5.209 S5.271 S5.286A S5.286B	455-456 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) S5.286A S5.286B S5.286C	455-456 FIXED MOBILE S5.209 S5.27 S5.286A S5.286B S5.286C S5.36E	FIXED	
	S5.209 S5.271 FIXED MOBILE S5.271 S5.287 S5.288		FIXED MOBILE	
459-460 FIXED MOBILE	FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) S5.286A S5.286B S5.286C	459-460 FIXED MOBILE S5.209 S5.21 S5.286A S5.286B	FIXED MOBILE	
S5.209 S5.271 S5.286A S5.286B S5.286C S5.286E 460-470	\$5.209 \$5.271 FIXED	S5.286C S5.86E S5.286A S5.286B	FIXED	
400-470	MOBILE Meteorological-Satellite (space-to- S5.287 S5.288 S5.289 S5.290	Earth)	MOBILE	

		470-890 MHz		
	Read only		To be c	completed
	Allocation to services	. :		
Region 1	Region 2	Region 3	National Allocation	Remarks
470-790 BROADCASTING	470-512 BROADCASTING Fixed Mobile S5.292 S5.293 512-608 BROADCASTING S5.297 608-614 RADIO ASTRONOMY Mobile-satellite except	470-585 FIXED MOBILE BROADCASTING S5.291 S5.298 585-610 FIXED MOBILE BROADCASTING RADIONAVIGATION	FIXED MOBILE BROADCASTING	
S5.149 S5.291A S5.294 S5.296 S5.300 S5.302 S5.304 S5.306 S5.311 S5.312 790-862 FIXED BROADCASTING S5.312 S5.314 S5.315 S5.316	aeronautical mobile-satellite (Earth-to-space) 614-806 BROADCASTING Fixed Mobile S5.293 S5.309 S5.311 806-890 FIXED MOBILE	S5.149 S5.305 S5.306 S5.307 610-890 FIXED MOBILE BROADCASTING	FIXED MOBILE BROADCASTING	
S5.319 S5.321 862-890 FIXED MOBILE except aeronautical mobile BROADCASTING S5.322	BROADCASTING			

Read only			To be co	mpleted
Allocation to services			·	
Region I	Region 2	Region 3	National Allocation	Remarks
S5.319 S5.323	S5.317 S5.318	\$5.149 \$5.305 \$5.306 \$5.307 \$5.311 \$5.320		

890-1 350 MHz

890-942	890-902	890-942		*
FIXED	FIXED	FIXED		
MOBILE except aeronautical	MOBILE except aeronautical mobile	MOBILE		·
mobile	Radiolocation	BROADCASTING		
BROADCASTING \$5.322	S5.318 S5.325	Radiolocation	1	
Radiolocation				
	902-928			
	FIXED			
	Amateur	·	İ	
	Mobile except aeronautical mobile			
	Radiolocation			
	S5,150 S5,325 S5,326			
	928-942			
	FIXED			
·	MOBILE except aeronautical mobile		_	
,	Radiolocation		2	
\$5.323	S5.325	85.327		
942-960	942-960	942-960		
FIXED	FIXED	FIXED		
MOBILE except aeronautical	MOBILE	MOBILE		
mobile		BROADCASTING		
BROADCASTING \$5.322				
S5.323		S5.320		

Part II

Attachment 2

QUESTIONNAIRE - PART II (To be completed by Administrations only)

General Questions on National Spectrum Management

Describe succinctly the problems that your administration is currently experiencing in national spectrum management (for example subject areas in national spectrum management).

Counti	y Union Of Myanmar (BRM)	<u> </u>
Focal 1	DIRECTOR GENERAL, POSTS & TELECOMMUNICATIONS DEPARTMENT	
function Manag	llowing general questions on national spectrum management are based in sonal requirements of spectrum management described in the handbook on gement." If you need additional space to answer the cuestions please continuof paper.	"National Spectrum
1.	Do you have a national law governing spectrum management?	YES_NO_
•	- Last date this law was changed or modified?	
	- Are any actions planned to change this law?	YES_NO_
	Have any problems been identified? and if so, do you need any assistance solving them?	from the ITU in
	This administration is now considering national law governing spectrum	n management,
	Technical assistant from ITU for this case is preferable.	
	Have you published regulations and procedures for national spectrum man services, license requirements etc.)?	nagement (e.g. racio YES_NO_
	Have any problems been identified? and it so, do you need any assistance solving them?	nom die ITU in
	In 1958, this administration published radio service and license requirem	ent etc. To the public.
	Information from ITU regarding this subject is preferable.	
3.	Do you have a national radio frequency spectrum allocation table?	YES_NO_
	Have any problems been identified? and if so, do you need any assistance solving them?	e from the ITU in
	Radio frequency monitoring is required to examine this national frequen	ncy spectrum allocation
	table. Radio frequency monitoring is now underway. Equipment and tec	chnical assistant is neede
	for our consideration.	

Part II

4.	Do you have technical specifications for national spectrum use?	YES_	_NO					
	Have any problems been identified? and if so, do you need any assist solving them?	ance from	the ITU in					
	This administration use ITU Radio Regulation for specifications and no other particular							
	specification for type approved. Information assistant will be require	ed for this	subject					
5.	Do you have a need for any spectrum redeployment*?	YES_	_NO					
asses use;	e term "redeployment" is used here to refer to a process of national scossment is conducted 1) to determine if portions of spectrum can be identified and 2) to determine if such spectrum segments can be reallocated for a communication services that have expanding spectrum requirements.	ntified that	ere in limited					
	- If so, do you have a strategy for achieving this redeployment in respand for given radiocommunication services?		uency bands NO					
	- Please define the established strategy and describe the nature of the users regarding the potential costs resulting from the planned redeplo		or, if any, with					
6.	What is the total cost of national spectrum management functions per Government (expressed in Swiss francs)?	rformed by	your					
	- What is the source of the funding required to accomplish these spe functions?	ctrum man	agement					
7.	Do you have a method for establishing spectrum users' fees?	YES	_NO					
	- If so, please give a brief description of the method used in establish After this administration get expert mission assistant from APT, v							
8.	Do you maintain centralized databases for spectrum management?	YES						
	- What is the approximate size of your database (expressed in number of records)?	45	500					

- Do you have a computerized data base management system (DBMS)?	YES_NO_
- What DBMS system do you use?	
- Are these frequency assignment records available to public?	YES NO
Have any problems been identified? and if so, do you need any assolving them?	sistance from the ITU in
This administration will get expert mission assistant from APT.	We want ITU to give long
basis assistant to fulfil this subject.	
Do you notify frequency assignments to the ITU?	YES_NO_
Have any problems been identified? and if so, do you need any as solving them?	ssistance from the ITU in
Do you have a policy and planning function for national spectrum strategy for future use of the spectrum)? Have any problems been identified? and if so, do you need any as solving them?	YES_NO_
Do you perform technical analyses of frequency assignment reque	ests? YES_NO_
Have any problems been identified? and if so, do you need any a solving them?	ssistance from the ITU in
Do you perform radio monitoring?	YES_NO_
- number of fixed monitoring stations	1 under process
- facilities available at fixed monitoring stations	

- -- direction finding up to 29 MHz

- 18. Do you use the ITU-R Handbooks and Reports on:
 - a) National Spectrum Management, version 1995?
 - b) Spectrum Monitoring¹, version 1995?
 - c) Computer-aided Techniques for Spectrum Management, version 1999?
 - d) HF Broadcasting System Design, version 1999?
 - e) Report SM.2012, Economic Aspects of Spectrum Management, version 1997²?
 - f) Windows Basic Automated Spectrum Management System (WinBASMS) Software Version 1997, Manual Version 1997

What additional information/handbooks do you need from the ITU?

Frequency Management and monitoring is one of the main function of this administration.

So we tried to get assitant from regional or international organization. We want ITU-R

Handbooks and Reports on item a, b, c&f reference above.

To be returned no later than 31 January 2000 to:
ITU-D Study Groups Secretariat
Telecommunication Development Bureau
Fax: +41 22 730 54 84
E-Mail: devsg1@itu.int

THANK YOU FOR YOUR COOPERATION

¹ The Spectrum Monitoring Transcount is cuttomit being updated, therefore, you are urged to contact Mr lan Verduiin (NL), the designated Rapporteur from ITU-R Study Group 1, Working Party 1C if you have any comments that you wish included in a future version of this Handbook.

² This Report SM.2012 was updated during the ITU-R Study Group 1 meeting in August 1999. This new version is expected to be available in the three working languages by January 2000.