



UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS  
BUREAU DES RADIOCOMMUNICATIONS

INTERNATIONAL TELECOMMUNICATION UNION  
RADIOCOMMUNICATION BUREAU

UNIÓN INTERNACIONAL DE TELECOMUNICACIONES  
OFICINA DE RADIOCOMUNICACIONES

© I.T.U.

RÉSEAU À SATELLITE SATELLITE NETWORK RED DE SATÉLITE		<b>SWISSCUBE</b>		PARTIE PART PARTE	<b>II-S</b>
STATION TERRIENNE EARTH STATION ESTACIÓN TERRENA		---		BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	<b>2624 / 22.07.2008</b>
ADM. RESPONSABLE RESPONSIBLE ADM. ADM. RESPONSABLE	<b>SUI</b>	LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL	<b>NGSO</b>	NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN	<b>107500492</b>
RENSEIGNEMENTS REÇUS PAR LE BUREAU LE / INFORMATION RECEIVED BY THE BUREAU ON / INFORMACIÓN RECIBIDA POR LA OFICINA EL					<b>09.11.2007</b>

Frequency assignments recorded in the Master Register under / Assignations de fréquence inscrites dans le Fichier de référence au titre de / Asignaciones de frecuencia inscrites en el Registro con arreglo al

<b>X</b>	<b>Article 11 du Règlement des radiocommunications / Article 11 of the Radio Regulations / Artículo 11 del Reglamento de Radiocomunicaciones</b>
	<b>Article 5 des Appendices 30 et/ou 30A / Article 5 of Appendices 30 and/or 30A / Artículo 5 de los Apéndices 30 y/o 30A</b>
	<b>Article 8 de l'Appendice 30B / Article 8 of Appendix 30B / Artículo 8 del Apéndice 30B</b>

Pour plus d'informations sur les dispositions réglementaires et l'explication des codes ou symboles utilisés dans cette publication, veuillez consulter la [Préface](#)

For more details on the regulatory provisions and the explanation of the codes or symbols used in this publication, please consult the [Preface](#).

Para más detalles sobre las disposiciones reglamentarias y la explicación de los códigos o símbolos utilizados en esta publicación, sírvase consultar el [Prefacio](#).



国际电信联盟  
无线电通信局

МЕЖДУНАРОДНЫЙ СОЮЗ ЭЛЕКТРОСВЯЗИ  
БЮРО РАДИОСВЯЗИ

الاتحاد الدولي للاتصالات  
مكتب الاتصالات الراديوية

© I.T.U.

卫星网络 СПУТНИКОВАЯ СЕТЬ الشبكة الساتلية	<b>SWISSCUBE</b>	部分 ЧАСТЬ الجزء	<b>II-S</b>
地球站 ЗЕМНАЯ СТАНЦИЯ المحطة الأرضية	---	无线电通信局国际频率信息通报 / 日期 ИФИК БР / ДАТА النشرة الإعلامية الدولية للترددات / رقمها وتاريخها	<b>2624 / 22.07.2008</b>
负责主管部门 ОТВЕТСТВЕННАЯ АДМ. الإدارة المسؤولة	<b>SUI</b>	标称经度 НОМИНАЛЬНАЯ ДОЛГОТА خط الطول الاسمي	<b>NGSO</b>
识别号 ИДЕНТИФИКАЦИОННЫЙ НОМЕР رقم تعرف الهوية			<b>107500492</b>
通信局收到资料的日期 / ДАТА ПОЛУЧЕНИЯ ИНФОРМАЦИИ БЮРО / معلومات استلمها المكتب في			<b>09.11.2007</b>

根据以下条款登记在《国际频率登记总表》中的频率指配 / Частотные присвоения, внесенные в Справочный регистр согласно / تخصيصات تردد مسجلة في السجل الأساسي بموجب

X 《无线电规则》第 11 条 / Статья 11 Регламента радиосвязи / المادة 11 من لوائح الراديو

附录 30 和/或 30A 第 5 条 / Статья 5 Приложений 30 и/или 30A / 30A / 30A 或/أو المادة 5 من التذييلين 30 و/أو

附录 30B 第 8 条 / Статья 8 Приложения 30B / 30B 的 التذييل المادة 8 من التذييل

欲更详细了解本公报资料中使用的规则性条款和代码或符号的说明，请查阅[前言](#)。

Более подробная информация о регламентарных положениях и разъяснение кодов либо обозначений, используемых в настоящей публикации, содержится в [Предисловии](#).

يرجى الرجوع إلى [المقدمة](#) للاطلاع على مزيد من التفاصيل الخاصة بالأحكام التنظيمية وتفسير الرموز والمعطيات المستعملة في هذا القسم.

<p>On trouvera la description des éléments de données utilisés dans les publications pour la Partie I-S, la Partie II-S et la Partie III-S dans le document: <a href="#">ItemsDescription_F.pdf</a></p>	<p>The description of the data items used in the publications for Part I-S, Part II-S and Part III-S can be found in the document: <a href="#">ItemsDescription_E.pdf</a></p>	<p>La descripción de los datos empleados en las publicaciones de la Parte I-S, Parte II-S y Parte III-S figura en el documento: <a href="#">ItemsDescription_S.pdf</a></p>
<p>可在下列文件中查到I-S部分、II-S部分和III-S部分各项公布中所用各项数据的描述: <a href="#">ItemsDescription_C.pdf</a></p>	<p>Описание элементов данных, используемых в публикациях для Части I-S, Части II-S и Части III-S, можно найти в документе: <a href="#">ItemsDescription_R.pdf</a></p>	<p>يُرد وصف لبنود البيانات المستعملة في منشورات الجزء I-S والجزء II-S والجزء III-S في الوثيقة: <a href="#">ItemsDescription_A.pdf</a></p>

PARTIE II-S / PART II-S / PARTE II-S / 第II-S部分 / ЧАСТЬ II-S / II-الجزء										
A	A1a Sat. Network	SWISSCUBE	A1f1 Notifying adm.	SUI	A1f3 Inter. sat. org.		BR1 Date of receipt	09.11.2007	BR20/BR21 BR IFIC no./part	2624/2
	BR6a/BR6b Id. no.	107500492	BR3a/BR3b Provision reference	11.2	N		BR2 Adm. serial no.			

### Modification des caractéristiques techniques

Veillez noter que les caractéristiques techniques

	ont été modifiées
<b>X</b>	n'ont pas été modifiées

depuis la publication de la fiche de notification dans la Partie I-S de la BRIFIC 2611 / 22.01.2008.

### Changes in Technical Characteristics

Please note that the technical characteristics

	have been modified
<b>X</b>	have not been modified

since the publication of the notice in Part I-S of BRIFIC 2611 / 22.01.2008.

### Cambios en las características técnicas

Sírvase tomar nota de que las características técnicas

	se han modificado
<b>X</b>	no se han modificado

desde la publicación de la notificación en la Parte I-S de la BRIFIC 2611 / 22.01.2008.

### 技术特性的变化

请注意，自BRIFIC 2611 / 22.01.2008 I-S 部分中的通知公布以来，技术特性

	已经修改
<b>X</b>	未经修改

### Изменения в технических характеристиках

Просьба учесть, что технические характеристики

	были изменены
<b>X</b>	не были изменены

после публикации заявки в Части I-S BRIFIC 2611 / 22.01.2008.

### تغيرات في الخصائص التقنية

يرجى ملاحظة أن الخصائص التقنية

	خضعت للتعديل
<b>X</b>	لم تخضع للتعديل

منذ نشر معلومات بطاقة التبليغ في الجزء I-S من النشرة الإعلامية الدولية للترددات : BRIFIC2611 / 22.01.2008.

PARTIE II-S / PART II-S / PARTE II-S / 第II-S部分 / ЧАСТЬ II-S / II-سءءء										
A	A1a Sat. Network	SWISSCUBE	A1f1 Notifying adm.	SUI	A1f3 Inter. sat. org.		BR1 Date of receipt	09.11.2007	BR20/BR21 BR IFIC no./part	2624/2
	BR6a/BR6b Id. no.	107500492	BR3a/BR3b Provision reference	11.2	N		BR2 Adm. serial no.			

Résumé / Summary / Resumen / 綜述 / Резюме / خلاصة

B1a Beam designation	B2 Emi-Rcp	BR8 Action code	BR7a Group id.	BR9 Action code	13A Conformity with RR	C3a Assigned freq. band	BR47 Frequency band (MHz)	BR15 Provision reference	BR53 Nb of freq.	C4a Class of station	BR54 Nb of emiss.
UPLINK	R		107656609		A-----	4	145.978 - 145.982		1	EA	1
DOWNLINK	E		107656608		A-----	4	437.503 - 437.507		1	EA	2

A	A1a Sat. Network	SWISSCUBE	A1f1 Notifying adm.	SUI	A1f3 Inter. sat. org.		BR1 Date of receipt	09.11.2007	BR20/BR21 BR IFIC no./part	2624/2
	BR6a/BR6b Id. no.	107500492	BR3a/BR3b Provision reference	11.2	N		BR2 Adm. serial no.		UPLINK	R

BR19 Ref. to BR IFIC I A1f2 Submitted on behalf A4b1 No. of orbital planes  A4b2 Ref. body A4b3a No. of space stations simult. trans. on Northern Hemisphere  A4b3b No. of space stations simult. trans. on Southern Hemisphere A4b7a Max. sat. rcv. simult.  A4b7b Avg. no. of As. E-stn  A4b7c Avg. distance  A4b7d1 Excl. zone type  A4b7d2 Excl. zone width  A4b7d3 Attach. Orbital plane no. A4b4a Inclination angle  A4b4b No. of satellites in this plane  A4b4c Period  A4b4d Apogee  A4b4e Perigee A4b5a Right asc.  A4b5c Arg. of perigee A4b6b Min. operating altitude  A4b6c Station keeping  A4b6d Repeat period  A4b6e Specific modelled station  A4b6f Precession rate A4b6g Long. asc. node  A4b6j Long. tolerance A17a Compliance with PFD limit dB(W/(m<sup>2</sup>·1MHz)) in the band 1164 - 1215 MHz A17b2 Calculated aggregate PFD value in the band 5030.0 - 5150.0 MHz  dB(W/(m<sup>2</sup>·150 kHz))A17b3 EPFD in the band 4990.0 - 5000.0 MHz  dB(W/(m<sup>2</sup>·10 MHz))A17c Aggregate PFD in the band 15.35 - 15.4 GHz  dB(W/(m<sup>2</sup>·50 MHz))A17d Mean PFD in the band 35.5 - 36.0 GHz  dB(W/(m<sup>2</sup>·1 MHz))A17e1a Calculated EPFD value in the band 42.5 - 43.5 GHz at RA SDT  dB(W/(m<sup>2</sup>·1 GHz))A17e1b Calculated EPFD value in the band 42.5 - 43.5 GHz at RA SDT  dB(W/(m<sup>2</sup>·500 kHz))A17e1c Calculated EPFD value in the band 42.5 - 43.5 GHz at RA VLBI  dB(W/(m<sup>2</sup>·500 kHz))A15a EPFD compliance  A18a Aircraft earth station commitment 

<input type="text"/>	B1a/BR17 Beam designation	UPLINK	<input type="text"/>	B1b Steerable	<input type="text"/>	B2 Emi-Rcp	R	B3a1 Max. co-polar gain	<input type="text" value="3"/>
----------------------	---------------------------	--------	----------------------	---------------	----------------------	------------	---	-------------------------	--------------------------------

## B3c1 Co-polar antenna pattern

Co-polar ref. pattern	Coef. A	Coef. B			Co-polar rad. diag.
ND-SPACE					

B4a3a1 Angle alpha  B4a3a2 Angle beta 

<input type="text"/>	BR7a/BR7b Group id.	107656609	BR1 Date of receipt	09.11.2007	C2c RR No. 4.4	<input type="text"/>
----------------------	---------------------	-----------	---------------------	------------	----------------	----------------------

A2a Date of bringing into use  A2b Period of valid.  A3a Op. agency  A3b Adm. resp.  BR16 Value of type C8b BR62 Expiry date for bringing into use  BR63 Confirmed date of bringing into use  BR64 Date of receipt of 1st Res49 BR14 Special Section C4a Class of station  C3a Assigned freq. band  C5a Noise temperature  B4b5 Peak of pfd C4b Nature of service  C6a Polarization type  C6b Polarization angle C11a1 Service area no.  C11a2 Service area  C11a3 Service area diagram A5/A6 Coordinations/Agreements 

C2a1 Assigned frequency									
145.98	MHz								

PARTIE II-S / PART II-S / PARTE II-S / 第II-S部分 / ЧАСТЬ II-S / II-S الجزء

A A1a Sat. Network SWISSCUBE A1f1 Notifying adm. SUI A1f3 Inter. sat. org. BR1 Date of receipt 09.11.2007 BR20/BR21 BR IFIC no./part 2624/2

BR6a/BR6b Id. no. 107500492 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no. UPLINK R

A13 Ref. to Special Sections		C7a Design. of emission		C8a1/C8b1 Max. peak pwr	C8a2/C8b2 Max. pwr dens.	C8c1 Min. peak pwr	C8c2 Attch.	C8c3 Min. pwr dens.	C8c4 Attch.	C8e1 C/N ratio	C8e2 Attch.
API/A	/4527	1	4K00F1D--	13	-23	13		-23		19.8	

C10b1 Assoc. earth station id.	C10b2 Type	C10c1 Geographical coord.		C10c2 Ctry	C10d1/C10d2 Cls. / Nat.		C10d3 Max. iso. gain	C10d4 Bmwdth	C10d7 Ant. diameter	C8g1 Max. aggr. pwr.	C8g2 Aggr. bandwidth	C8g3 Transp. bandwidth = Aggr. bandwidth
EPFL HES FRIBOURG	S	006E33 55	46N31 10	SUI	1	TA CP	13.3	15				
	S	007E09 24	46N48 37	SUI	1	TA CP	11	15				

C10d5a Co-polar antenna pattern							
C10b1 Assoc. earth station id.	Co-polar ref. pattern	Coef. A	Coef. B	Coef. C	Coef. D	Phi1	Co-polar rad. diag.
EPFL HES FRIBOURG							1 4

Findings 2D Date of protection 09.11.2007 13A Conformity with RR A- -- -- 13B1 Provision 13B2 Remarks 13B3 Date of Review A/09.11.2008

13C Remarks ACTIVE ONLY NEAR SUI

B1a/BR17 Beam designation DOWNLINK B1b Steerable B2 Emi-Rcp E B3a1 Max. co-polar gain 3

B3c1 Co-polar antenna pattern					
Co-polar ref. pattern	Coef. A	Coef. B	Coef. C	Coef. D	Co-polar rad. diag.
ND-SPACE					

B4a3a1 Angle alpha B4a3a2 Angle beta

BR7a/BR7b Group id. 107656608 BR1 Date of receipt 09.11.2007 C2c RR No. 4.4

A2a Date of bringing into use 09.12.2008 A2b Period of valid. 1 A3a Op. agency 12 A3b Adm. resp. A BR16 Value of type C8b X

BR62 Expiry date for bringing into use 28.02.2014 BR63 Confirmed date of bringing into use BR64 Date of receipt of 1st Res49

BR14 Special Section

C4a Class of station EA C3a Assigned freq. band 4 B4b5 Peak of pfd

C4b Nature of service CP C6a Polarization type CR C6b Polarization angle

C8d1 Max. tot. peak pwr. 0 C8d2 Contiguous bandwidth 4

C11a1 Service area no. 1 C11a2 Service area SUI C11a3 Service area diagram

A5/A6 Coordinations/Agreements

C2a1 Assigned frequency											
437.505	MHz										

A13 Ref. to Special Sections		C7a Design. of emission		C8a1/C8b1 Max. peak pwr	C8a2/C8b2 Max. pwr dens.	C8c1 Min. peak pwr	C8c2 Attch.	C8c3 Min. pwr dens.	C8c4 Attch.	C8e1 C/N ratio	C8e2 Attch.
API/A	/4527	1	4K00F1D--	0	-36	0		-36		7.8	
		2	1K00N0N--	-10	-46	-10		-46		13.5	

C10b1 Assoc. earth station id.	C10b2 Type	C10c1 Geographical coord.		C10c2 Ctry	C10d1/C10d2 Cls. / Nat.		C10d3 Max. iso. gain	C10d4 Bmwdth	C10d6 Noise temp.	C10d7 Ant. diameter
EPFL HES FRIBOURG	S	006E33 55	46N31 10	SUI	1	TA CP	25	15	1000	
	S	007E09 24	46N48 37	SUI	1	TA CP	14	20	1000	



PARTIE II-S / PART II-S / PARTE II-S / 第II-S部分 / ЧАСТЬ II-S / II-S الجزء										
A	A1a Sat. Network	SWISSCUBE	A1f1 Notifying adm.	SUI	A1f3 Inter. sat. org.		BR1 Date of receipt	09.11.2007	BR20/BR21 BR IFIC no./part	2624/2
	BR6a/BR6b Id. no.	107500492	BR3a/BR3b Provision reference	11.2	N	BR2 Adm. serial no.			DOWNLINK	E

C10d5a Co-polar antenna pattern							
C10b1 Assoc. earth station id.	Co-polar ref. pattern	Coef. A	Coef. B	Coef. C	Coef. D	Phi1	Co-polar rad. diag.
EPFL							1
HES FRIBOURG							4

Findings	2D Date of protection	09.11.2007	13A Conformity with RR	A- -- --	13B1 Provision	5.282	13B2 Remarks	R	13B3 Date of Review	A/09.11.2008
13C Remarks	ACTIVE ONLY NEAR SUI									

C9 Modulation characteristics	C7a Designation of emission 4K00F1D--		
C9a1 Type of modulation	Modulation de fréquence 调频	Frequency Modulation Частотная модуляция	Modulación de frecuencia تشكيل التردد
C9a2a Lowest frequency			
C9a2b Highest frequency			
C9a2c Frequency deviation			
C9a3a Freq. deviation of the pre-emphasized signal			
C9a3b Pre-emphasis characteristics			
C9a3c Type of multiplexing			
C9a4a Bit rate	1200	1200	1200
C9a4b Number of phases	1	1	1
C9a5a Modulating signal attached (see atch. no.)	3	3	3
C9a5b Amplitude modulation			
C9a6a Peak-to-peak freq. dev.			
C9a6b Sweep frequency			
C9a6c Energy dispersal waveform			
C9a7 Type of energy dispersal			
C9a8 Other types of modulation (see atch. no.)			
C9a9 TV standard			
BR7a Group id.	107656608		





PARTIE II-S / PART II-S / PARTE II-S / 第II-S部分 / ЧАСТЬ II-S / II-S الجزء										
A	A1a Sat. Network	SWISSCUBE	A1f1 Notifying adm.	SUI	A1f3 Inter. sat. org.		BR1 Date of receipt	09.11.2007	BR20/BR21 BR IFIC no./part	2624/2
	BR6a/BR6b Id. no.	107500492	BR3a/BR3b Provision reference	11.2	N	BR2 Adm. serial no.			DOWNLINK	E

C9 Modulation characteristics		C7a Designation of emission 4K00F1D--		
C9a1 Type of modulation	Modulation de fréquence 调频	Frequency Modulation Частотная модуляция	Modulación de frecuencia تشكيل التردد	
C9a2a Lowest frequency				
C9a2b Highest frequency				
C9a2c Frequency deviation				
C9a3a Freq. deviation of the pre-emphasized signal				
C9a3b Pre-emphasis characteristics				
C9a3c Type of multiplexing				
C9a4a Bit rate	1200	1200		1200
C9a4b Number of phases				
C9a5a Modulating signal attached (see attch. no.)				
C9a5b Amplitude modulation				
C9a6a Peak-to-peak freq. dev.				
C9a6b Sweep frequency				
C9a6c Energy dispersal waveform				
C9a7 Type of energy dispersal				
C9a8 Other types of modulation (see attch. no.)				
C9a9 TV standard				
BR7a Group id.	107656609			

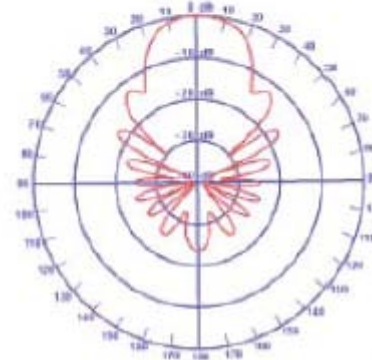
Figure / Figura / 图 / Рисунок / الشكل 1

Diagramme de rayonnement de l'antenne des stations terriennes de réception EPFL et HES FRIBOURG  
EPFL and HES FRIBOURG receiving Earth Stations Antenna Radiation Pattern  
Diagrama de radiación de la antena de las estaciones terrenas de recepción EPFL y HES FRIBOURG  
EPFL 和 HES FRIBOURG接收地球站天线辐射方向图  
Диаграмма направленности излучения антенны приемных земных станций EPFL и HES FRIBOURG  
مخطط إشعاع الهوائي لمحطات الاستقبال الأرضيتين EPFL و HES FRIBOURG

Faisceau / Beam / Haz / 波束 / Луч / الحزمة: DOWNLINK



Polarisation V  
Polarization V  
Polarización V  
极化 V  
Поляризация V  
الاستقطاب V

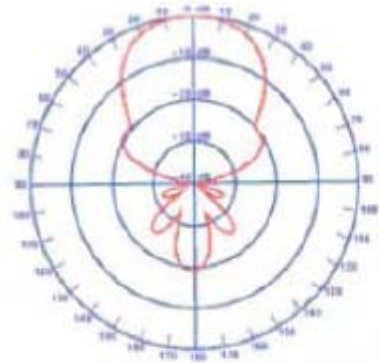


Polarisation H  
Polarization H  
Polarización H  
极化 H  
Поляризация H  
الاستقطاب H

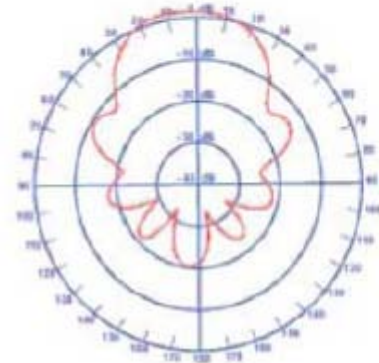
الشكل / 2 / Rисунок / 图 / Figura / Figure

Diagramme de rayonnement de l'antenne des stations terriennes d'émission EPFL et HES FRIBOURG  
EPFL and HES FRIBOURG transmitting Earth Stations Antenna Radiation Pattern  
Diagrama de radiación de la antena de las estaciones terrenas de emisión EPFL y HES FRIBOURG  
EPFL 和 HES FRIBOURG 发射地球站天线辐射方向图  
Диаграмма направленности излучения антенны передающих земных станций EPFL и HES FRIBOURG  
مخطط إشعاع الهوائي لمحطات الإرسال الأرضيتين EPFL و HES FRIBOURG

الحزمة / UPLINK / Луч / 波束 / Beam / Faisceau



Polarisation V  
Polarization V  
Polarización V  
极化 V  
Поляризация V  
الاستقطاب V



Polarisation H  
Polarization H  
Polarización H  
极化 H  
Поляризация H  
الاستقطاب H

