

Survey of SI data use

Collation of 11 replies to the DigiTAG_EICTA SI Data Survey

WG017, r0	Original version, just survey data
WG017, r1 13th March 2003	Added EBook details (except for PAT, PMT, AIT, CAT, UNT)

Table Use

Operational status	A	C	D	G	I	B	F	K	J	H	E
	FO	FO	FO	FO	FO	O	P	P	Exp	NO	-
Table	Broadcast?										
NIT actual	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
NIT other						F					
SDT actual	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SDT other	Y	Y	Y			pF	Y			Y	
EIT P/F actual	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
EIT P/F other	Y	Y	Y			pF	Y			Y	
EIT Sch actual		pF	Y			Y	Y		Y		
EIT Sch other		pF	Y			Y					
TOT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
TDT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
BAT							Y				
PAT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PMT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
CAT			Y	Y	Y		Y	Y	Y	Y	
AIT			Y			Y	Y	Y	Y		
UNT			Y			F	F				

EBook	
broadcast	receive
M	m
O	
M	m
M	m
M*	m*
M*	m*
O	O
O	O
R	m
M	m
U	U
M	m
M	m
C	
New	New
New	New

	A	C	D	G	I	B	F	K	J	H	E
	FO	FO	FO	FO	FO	O	P	P	Exp	NO	-
Repetition rate: At Least every (seconds):											
	10	10	10	5	1	0.5	2	8	10	2	10
				10	(2)					2	
	2	2	2	1	1	0.5	2	1.5	2	1	2
	10	2	2	5	2		2			1	
	2	2	2	1	2	1	2	1.5		1	
	5	2	2	10	2		2			1	
first day:			30	10		5	10				
rest:			30	10		5	30				
first day:			30	10			10				
rest:			30	10			30				
	1	1	30	10	10	3	1	25		30	30
	1	1	30	30	10	3	1	25	30	30	30
				5	-						
	0,1	0,085	0,5	0,1	0,1	0,1	0,1	0,1	1	0,1	0,5
	0,1	0,1	0,5	0,1	0,1	0,1	0,1	0,1	1	0,1	0,5
			1	0,1	0,1	0,1				0,2	
			2		0,1	0,5	0,5		2	10	

TR 101 211	
NIT	≤ 10 secs
SDT actual	≤ 2 secs
SDT other	≤ 10 secs
EIT p/f actual	≤ 2 secs
EIT p/f other	≤ 20 secs
EIT sched actual first day	≤ 10 secs
EIT sched actual	≤ 30 secs
EIT sched other first day	≤ 60 secs
EIT sched other	≤ 300 secs
TDT & TOT	≤ 30 secs
BAT	≤ 10 secs if present

Sched: number of days		8		3		1	
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* Mandatory if
EIT_present_following_flag =

FO	Fully Operational
O	Operational - might be some changes
P	Preliminary - likely to be changes
Exp	Experimental - may not be fully defined and there will be some changes
NO	Not yet operational - not fully defined yet
-	Not indicated

Y	Yes, broadcast
F	Future plan to broadcast
pF	Possible Future broadcast

M	Mandatory to broadcast
m	Mandatory to understand (receiver)
C	Conditional to broadcast
R	Recommended to broadcast
O	Optional to broadcast
U	Undefined to broadcast
F	Forbidden to broadcast
New	New since EBook_1

Legend	
Broadcast (Y/N)	Please indicate if this is broadcast (Y) or not (N)
Number used	Indicate number of times this descriptor is used in this loop
Dynamics	Dynamic = changed more than once per year; Static=changed less than once per year
User Defined	Please indicate if any Private Data is used
Y	Yes
N	No
N/A	Not Applicable

M	Mandatory to broadcast			
m	Mandatory to understand (receiver)			
C	Conditional to broadcast			
R	Recommended to broadcast			
O	Optional to broadcast			
U	Undefined to broadcast			
F	Forbidden to broadcast			
New	New since EBook 1			

FO	Fully Operational
O	Operational - might be some changes
P	Preliminary - likely to be changes
Exp	
NO	Not yet operational - not fully defined yet
-	Not indicated

Y	Yes, broadcast
F	Future plan to broadcast
pF	Possible Future broadcast

Service Description Table

location	Descriptor/table and field from TR 101 211	A	B	C	D	E	F	G	H	I	J	K	EBook												
		FO	O	FO	FO	-	P	FO	NO	FO	Exp	P	actual b'cast	actual receive	other b'cast	other receive									
	Max number of services in SDT	13	5	13		8	10	5		12 (7)		13													
Actual and Other	announcement_support_descriptor																								
	Which Announcment types do you use?																								
	Which Reference types do you use?																								
	bouquet_name_descriptor									>= 0															
	ca_identifier_descriptor									0/1	Y	D			C	C									
	Which ca_system_id's do you use?																								
	country_availability_descriptor									0/1															
	data_broadcast_descriptor									>= 0															
	Which component tag values do you use?																								
	linkage_descriptor:									>= 0					O	O									
	01 - to a service that contains information about this service																								
	02 - to an Electronic Program Guide (EPG) for this service																								
	03 - refers to a CA replacement service for this service										pF	1	S												
	05 - to a replacement service for this service										pF	1	S		O	O									
	08 - to an alternate if actual not available																								
mosaic_descriptor									0/1					O	O										
multilingual_service_name_descriptor									0/1					O	m										
NVOD_reference_descriptor									0					F	F										
service_descriptor	Y	S	Y	4	S	Y		Y	y	y	1	S	Y	5	S	Y	1	Y	D	y	3	d	Y	S	
Which service_types do you use? (T=TV; R=Radio; D=Data)	T	R	T	R	T	R	D	T	R	T	T	T	T	T	R	D	T	T	T	R	D	T	T	R	D
TV=0x01; Radio=0x02; Data=0x0C																									
service_availability_descriptor										>= 0															
Is this used to specify where cells are available (availability flag = 1)?																									
Is this used to specify where cells are NOT available (availability flag = 0)?																									
Private / User Defined Descriptors																									
Type (eg logical_channel_number, eacem_stream, etc):																									
Boxer (Senda) private Channel_List_Descriptor 0xF1														Y	12	D									

[See Legend for explanation of symbols](#)

Time Offset Table

Descriptor/table and field from TR 101 211	A			B			C			D			E			F			G			H			I			J			K		
	Broadcast (Y/N)?	Number used	Dynamics	Broadcast (Y/N)?	Number used	Dynamics	Broadcast (Y/N)?	Number used	Dynamics	Broadcast (Y/N)?	Number used	Dynamics	Broadcast (Y/N)?	Number used	Dynamics	Broadcast (Y/N)?	Number used	Dynamics	Broadcast (Y/N)?	Number used	Dynamics	Broadcast (Y/N)?	Number used	Dynamics	Broadcast (Y/N)?	Number used	Dynamics	Broadcast (Y/N)?	Number used	Dynamics			
local_time_offset_descriptor	Y	1	D	Y	1	D	Y	1	D	Y			Y		s	Y	1	d	Y	1	D	Y	1		Y								
when broadcast (continuously, n days before time change, other: please specify)	cont			cont 3sec			cont			1 wk before change			cont			cont			cont						cont								

EBook
>= 1
"as soon as practical after a change in the current time offset"

Private / User Defined Descriptors																														
Type (eg logical_channel_number, eacem_stream, etc):																														

[See Legend for explanation of symbols](#)

Bouquet Association Table

		A	B	C	D	E	F	G	H	I	J	K	
		FO	O	FO	FO	-	P	FO	NO	FO	Exp	P	
location	Descriptor/table and field from TR 101 211	Broadcast (Y/N)?	Number used	Dynamics	Broadcast (Y/N)?	Number used	Dynamics	Broadcast (Y/N)?	Number used	Dynamics	Broadcast (Y/N)?	Number used	Dynamics
First Loop	Bouquet_name_descriptor						y	1	S		Y	1	
	ca_identifier_descriptor										0/1		
	Which ca_system_id's do you use?												
	country_availability_descriptor										0/1		
	Is this used to specify where cells are available (availability flag = 1)?										1/2		
	Is this used to specify where cells are NOT available (availability flag = 0)?												
	linkage_descriptor:										Y=0		
	01 - to a service that contains information about the network												
	02 - to an Electronic Program Guide (EPG) for the network												
	03 - refers to a CA replacement service for this service												
	05 - to a replacement service for this service												
	08 - to an alternate if actual not available												
multi-lingual_bouquet_name_descriptor											Y=0		
2nd Loop	service_list_descriptor						y	1	S		Y	1	

EBook

Undefined to broadcast; "no additional semantics are defined for this table"

Private / User Defined Descriptors												
Type (eg logical_channel_number, eacem_stream, etc):												

[See Legend for explanation of symbols](#)

location

Program Association Table

	A	B	C	D	E	F	G	H	I	J	K
	FO	O	FO	FO	-	P	FO	NO	FO	Exp	P
Descriptor/table and field from ISO 613818-1 / ITU-T Rec H.222.0	Broadcast (Y/N)? Number used Dynamics	Broadcast (Y/N)? Number used Dynamics	Broadcast (Y/N)? Number used Dynamics	Broadcast (Y/N)? Number used Dynamics	Broadcast (Y/N)? Number used Dynamics	Broadcast (Y/N)? Number used Dynamics	Broadcast (Y/N)? Number used Dynamics	Broadcast (Y/N)? Number used Dynamics	Broadcast (Y/N)? Number used Dynamics	Broadcast (Y/N)? Number used Dynamics	Broadcast (Y/N)? Number used Dynamics
number of sections used	1	1	1	1	1	1	1		1	1	1
Private / User Defined Descriptors											
Type (eg logical_channel_number, eacem_stream, etc):											

[See Legend for explanation of symbols](#)

Program Map Table

A	B	C	D	E	F	G	H	I	J	K
FO	O	FO	FO	-	P	FO	NO	FO	Exp	P
Broadcast (Y/N)?	Broadcast (Y/N)?	Broadcast (Y/N)?	Broadcast (Y/N)?	Broadcast (Y/N)?	Broadcast (Y/N)?	Broadcast (Y/N)?	Broadcast (Y/N)?	Broadcast (Y/N)?	Broadcast (Y/N)?	Broadcast (Y/N)?

Descriptor/table and field
 from ISO 613818-1 / ITU-T Rec H.222.0;
 IS 613818-6; TS 102 812, EN 300 468, etc

notes
 Please indicate:
 - conditions, if descriptor is conditionally broadcast
 - any observations about a descriptor, eg usefulness, difficult to implement, etc.

First (or Program) Loop	Max number of descriptors used	A	B	C	D	E	F	G	H	I	J	K
CA-descriptor								Y		PF		
Data broadcast ID descriptor						Y						
Deferred association tag descriptor		Y					Y					
ES Info descriptor								Y				
ISO 639 descriptor								Y				
Maximum bitrate descriptor, 0x0E					Y							
Multiplex buffer utilization descriptor, 0x0C					Y							
Program info descriptor								Y				
Reserved Descriptor			Y									
Service move descriptor									TO			
Smoothing buffer descriptor, 0x10					Y							
STD_Descriptor								Y				
Stream Identifier Descriptor			Y									
Teletext_Descriptor								Y				
VBI data descriptor								Y				

Second (Component or ES Info) Loop
 Max number of descriptors used

Second (Component or ES Info) Loop	Max number of descriptors	A	B	C	D	E	F	G	H	I	J	K
AC3_descriptor					6	4	4	3		4-5	8	
Audio stream descriptor, 0x03		Y				Y	Y			TC		Y
Application signalling descriptor at AIT streams			Y					Y		TC	Y	
Association tag descriptors at MHP application streams			Y							TO		Y
CA_descriptor										TC	Y	
Carousel identifier descriptor 0x13		Y	Y					Y		TC		Y
Data broadcast id descriptor, 0x66		Y	Y			Y		Y		TO	Y	Y
Data stream alignment descriptor, 0x06						Y						
Deferred Association Tag Descriptor										TC		
ISO 639 language descriptors, 0x0A		Y				Y				TC	Y	Y
ITU-T Rec. H.220.0 ISO/IEC 13818-1 Reserved, 0x13						Y				TC		
ITU-T Rec. H.220.0 ISO/IEC 13818-1 Reserved, 0x14						Y				TC		
maximum bitrate descriptor, 0x0E						Y						
Private data specifier descriptor										TC	Y	
Reserved, 0x6F						Y						
STD_descriptor, 0x11						Y	Y					Y
Stream identifier descriptor, 0x52		Y	Y			Y		Y		TC		Y
Subtitling descriptor, 0x59		Y				Y				TC	Y	
target background grid descriptor		Y									Y	
Teletext descriptor, 0x56			Y			Y	Y	Y		TC	Y	Y
User defined descriptor 0x86												Y
Video Stream descriptor, 0x02		Y				Y	Y					Y

If Subtitle Descriptor is used, please indicate which subtitle_types are used

DVB Subtitles (normal), with no aspect ratio 0x10	Y										Y/N	
DVB Subtitles (normal) for display on 4:3 monitor, 0x11					Y					TBD	F	
DVB Subtitling (normal) 16:9 0x12											F	
DVB Subtitles (hard of hearing), no aspect ratio 0x20											Y/N	
DVB subtitling (hard of hearing) 4:3 0x21											F	
DVB subtitling (hard of hearing) 16:9 0x22											F	

If Teletext Descriptor is used, please indicate which Teletext_types are used

Initial teletext page, 0x00					Y							
Initial teletext page, 0x01								Y			Y	
Initial Teletext Page (undefined in reply)									Y	TBD		Y
Teletext Type B						Y						
Teletext Subtitle Page 0x02 ?								Y			Y	
Teletext program schedule Page 0x04											Y	
Teletext Subtitle Page 0x05 for hearing impaired											Y	

Private Descriptors	A	B	C	D	E	F	G	H	I	J	K	
OpenTV_Descriptor 0x90										Y		
OpenTV_Tag_Descriptor 0xFE										Y		
OpenTV_Track_Attributes_Descriptor 0xFD										Y		

Update Notification Table

<p align="center">Descriptor/table and field</p> <p align="center">from draft TS 102 006 (DVB-SSU) (TM2591, r2)</p>	<p align="center">notes</p> <p align="center">Please indicate: - conditions, if descriptor is conditionally broadcast - any observations about a descriptor, eg usefulness, difficult to implement, etc.</p>	<p align="center">Future Use</p> <p align="center">Please indicate any change to the current situation, with dates (if known), eg for service change / upgrade, current situation is temporary, etc</p>
Common Descriptors Loop		
Max number of descriptors used		
Please indicate in the Notes column which descriptors are used here		

Regions

	A				B				C				D				E				F				G				H				I				J				K							
	FO				O				FO				FO				-				P				FO				NO				FO				Exp				P							
In your country, how many levels are used?	3				4				1																2				3				2				3											
	Level				Level				Level				Level				Level				Level				Level				Level				Level				Level				Level							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
At which levels does your organisation broadcast?	Y	Y	Y		Y				Y				Y	F			Y				Y	Y			Y	Y	N	N					Y	Y	TX		Y								Y			
At each level, do you use MFN or SFN? (M / S / NA)	M	M	M		M				M	M			M				M	M			S	S											X				M								S			
How many networks do you operate at each level?	1	3	15		1				29				1	0	0	0	1				1	1			2	1							5	2x17			1				1							
Do these networks have the same name across different regions?	N	N	N						N				Y	Y			Y				Y				N	Y	Y						N	Y	?		Y											
Do you use different network_ids for the different regions?	Y	Y	Y						Y				Y	Y			n				n				Y	N	Y						Y	Y	N													
Do you substitute different TS between different regions of the "same" service?	N	Y	Y						N				N	N			n				???				N	N							Y															
Do you use NIToother to refer to higher levels?	N	N	N		N				N				N	N			n																pF				n											
Does this also refer to other broadcaster's services?					N								N	N			n								N	N							pF	pF														
Do you use NIToother to refer to other services at the same level?	N	N	N		N				N				N	N			n				n				N	N							pF	pF			n											
Does this also refer to other broadcaster's services?													N	N			n												pF	pF																		
Do you use NIToother to refer to lower levels?	N	N	N		N				N				N	N			n				n				N	N							pF	pF			n											
Does this also refer to other broadcaster's services?					N								N	N			n				n								pF	pF																		
Do you use Logical Channel Numbers?	Y	Y	Y		N				Y				Y	Y			n				n				N	N							Y	Y			Y											
Is the same LCN used for a service across different regions at each level?	Y	Y	Y						Y				Y	Y			n				n												Y	Y			Y	Y										
Are there services at different levels which have the same LCN?	Y								Y				n												Y																							
In a border area where a user might pick up more than on region, how does he differentiate between the services?	At level 2 by service name, e.g. "BBC1 NI". At level 3 only by program content.				They have different service_id				The user is not usually given the option by the receiver. It usually allocates the first instance of a service against the correct LCN and then places other services at a 'dumping' point high up in the list.				This is up to IRD ie it depends how IRD reacts, it might take strongest signal								N/A				use of cell_id				<p>For different regional news windows: Each service has unique Service_id. For a national service with regional news insertions, that service will have several unique service_id at all time (as many service_ids as that national service has regions). The receiver shall install all services with different MPEG triplet (Orig_netw_id, TS_id, Service_id) and for doublets (same triplet) the receiver should only install them ones. So if a receiver is able to receive a national service with different regional windows (that service will for the different regions have different service_id), it will treat this as two different services (since the triplet is always different). To this, the national service will have the same LCN at all regions. The receiver is expected to install one at the preferred LCN and the other requesting the same LCN at the last of the service list.</p> <p>For different regional service with the same LCN: The receiver is expected to...</p>																			

Language Use

	A	B	C	D	E	F	G	H	I	J	K
	FO	O	FO	FO	-	P	FO	NO	FO	Exp	P
Which ISO639 Language_codes do you use?	cat	Y									
	dan			Y					Y	Y	
	eng	Y	Y	Y					pF		
	fin			Y					Y		
	fra			Y							
	gae	Y									
	ger			Y							
	hun				Y						
	ice			Y							
	ita			Y		Y					
	nor			Y					Y		
	por			Y							
	rus			Y							
	smi			Y							
	spa			Y			Y				
	swe			Y					Y		
	und	Y									

Do these change in different regions?	N	N	N	N	N	N	N		N	N	
---------------------------------------	---	---	---	---	---	---	---	--	---	---	--

Which 1-byte ISO8859 character codes tables do you use?	?5	5	?	5	2	5			0,5	5,9	
---	----	---	---	---	---	---	--	--	-----	-----	--

Do you use 2-byte ISO10646 character codes? (please specify)	N	N	N	N		N			N	N	
--	---	---	---	---	--	---	--	--	---	---	--

Do you use the 1 or 2 byte control codes for accents?	N	N	N	2		N			N		
---	---	---	---	---	--	---	--	--	---	--	--

Do you use the 1 or 2 byte control codes for CR/LF?	N	N	N	2		Y			1		
---	---	---	---	---	--	---	--	--	---	--	--

Identifier allocation and validity

Identifier	Allocated by	Unique in scope of
Original Network ID		
Network ID		
Service ID		
Bouquet ID		
Transport Stream ID		
Cell ID		
Logical Channel Number		

Please indicate which body
allocates the ID

Please indicate the scope
where the ID is valid