

Applicant Information Package For The Implementation Of Digital Terrestrial Television Services

- Clarification Session 22 May 2012



| Suruhanjaya Komunikasi dan Multimedia Malaysia |

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SECTION ONE : Method, Procedures and Timetable (1/2)

Method

- 1) The assignment of spectrum shall be **by way of tender**.
- 2) The authorization to use the spectrum for implementation of DTT shall be by way of **Apparatus Assignment (AA)**.
- 3) The AA(s) for the spectrum identified shall be issued up to **3 MUXs , prior to ASO**.

Eligible Person(s)

- 1) A company incorporated in Malaysia under the Companies Act 1965 and as at the date of issuance of this AIP:
 - a) **Is not in possession of CASP(I) and ASP(C)** licences; and
 - b) **May possess a valid NFP(I) (radio communications transmitters and links) and NSP(I)**.
- 2) Any company **without a valid NFP(I) and NSP(I) licences** is eligible to submit their application , **provided that they submit the necessary licence application forms together with their submission of application**.

Invitation

- 1) SKMM **notifies the interested parties and publish notices on SKMM website, 2 National language and 2 English language newspapers for 3 consecutive days**.
- 2) Eligible person may purchase a **hard-copy for RM 100**.
- 3) Upon application, the applicant shall provide a **non-refundable entry fee of RM 10,000.00** made payable to Malaysian Communications and Multimedia Commission.

SECTION ONE : Method, Procedures and Timetable (2/2)



Timetable

Process	Date
Publication of Invitation	23 to 25 April 2012
AIP is available for purchase	23 to 30 April 2012
Close of Submission of Application	12 noon, 24 July 2012

SECTION TWO : Tender Evaluation Criteria (1/8)

Business Plan (BP)

Evaluation will be based on the **Applicant's Business Plan (BP)** for effective utilisation of spectrum in the UHF bands IV and V throughout the period of **fifteen (15) years**.

BP to be supported and substantiated with data and cost-benefit analysis, drawing upon proven cases, experiences and implementation.

BP shall be structured to comprise the following:

Part One: Strategy

Part Two: Service Rollout and Coverage

Part Three: Technology and Networks

Part Five: Past Experience and Track Record

Part Four: Service Offered, Charges and Quality

Part Six: Financial

Part Seven: Funding

Part Eight: Industry Development

Part Nine: Management

Part Ten: Consistency

SECTION TWO : Tender Evaluation Criteria (1/8)

Part One: Strategy

1. Applicant to demonstrate its strategy to design, **build, own and operate** the infrastructure for **DTT fixed TV reception services**.
2. Applicant to demonstrate its ability and capability to **function as a CIIP for the public and private broadcasters** on the DTT platform.
3. Applicant to outline **its strategy** in the following:
 - a) **providing free channels for all broadcasters on the DTT platform during the simulcast period;**
 - b) providing **cost efficiencies including future cost of upgrade** and enhancements;
 - c) providing bandwidth wholesale services on an **equitable and non-discriminatory** basis;
 - d) ensuring **interoperability** between the head end systems and multimedia receivers;
 - e) ensuring the **upgrade of services** to meet any future requirements of ASPs and CASPs;
 - f) **ensuring minimal disruption of air time** during the installation of end to end DTT equipment and networks. **The applicant is to be mindful that it shall bear any cost to be incurred as a result of any downtime during the said installation;**
 - g) **planning for a short simulcast period** to achieve Analogue Switch Off ahead of 31 December 2015 (“ASO date”); and
 - h) **subsidising set top box** to consumers.

SECTION TWO : Tender Evaluation Criteria (1/8)

Part Two: Service Rollout and Coverage

1. Applicant to ensure that the **coverage for the DTT services** shall be provided **at no worse off** from the current coverage for analogue broadcasting.

2. Applicant to outline its detailed strategy to **provide national and regional coverage for DTT services to meet the timelines and requirement of the FTA CASPs** on the DTT platform.

3. Applicant to **specify the number and characteristics of DTT transmitter stations to address service coverage requirements by the CASPs and ASPs** as outlined in Annex 3, including :

- a) calculation to **substantiate the coverage design,**
- b) demonstration of the tradeoff** between service coverage and its capacity to achieve optimal coverage design; and
- c) its plans for quality reception based on a **fixed 10 meter roof top antenna and indoor reception for urban and densely populated areas.**

4. Applicant to state its strategy in **addressing DTT service coverage gap** in areas that are currently receiving Analogue TV signal before ASO and without DTT coverage after ASO.

SECTION TWO : Tender Evaluation Criteria (2/8)

Part Three: Technology and Networks

The applicant shall provide and substantiate:

- a) its proposed design on the coverage and network design based on the **reference design in the SRSP using DVB-T2;**
- b) its proposal in using other network design, for **example using 256-QAM modulation technique to achieve a higher channel capacity;**
- c) its **end-to-end transmission network configuration;**
- d) its network design to include the location of the **DMBH to be in Angkasapuri, Kuala Lumpur** complete with a **Disaster Recovery Centre (DRC);** and
- e) its **technical data on the head end systems, end to end transmission network that will be interoperable** with multimedia receivers.

SECTION TWO : Tender Evaluation Criteria (3/8)

Part Four: Service Offered, Charges and Quality

The applicant shall state the following:

- a) **the types and design of wholesale bandwidth services** to carry DTT content and applications in High Definition (HD) TV and Standard Definition (SD) TV format including Electronic Programme Guide (EPG), other MPEG Service Information(SI) and DVB Service Information (SI) tables, Programmable Associated Data (PAD), Non-programmable Associated Data (NPAD);
- a) **future enhancements and upgrading** (if any) to the services, for example Subscriber Management System(SMS), enhanced Conditional Access (CA);
- a) the **end-to-end availability, quality of service , service level availability** to be offered to the ASPs and CASPs;
- a) its ability **to optimise and control cost and continuously pass on its benefits** to the ASPs and CASPs over the tenure whereby the rates of which **shall not exceed** the current rates paid by the CASPs.

SECTION TWO : Tender Evaluation Criteria (4/8)

Part Five: Past Experience and Track Record

The applicant shall state the following:

- a) its **management and technical reliability with good past experience**;
- b) their **business partners** in digital broadcasting;
- c) **references** in the country that they have rolled out; and
- d) **testimony** of clients.

Part Six: Financial

The applicant shall:

- a) show **good track record for the last 3 years** (improved profitability, healthy debt position etc.);
- b) provide **financial projections** including for the period of 15 years;
- c) provide the **individual Audited Financial Statement** of all the shareholders in the Joint Venture company, if applicable,
- d) provide **detailed costing in the design and build of the infrastructure for DTT**; and

SECTION TWO : Tender Evaluation Criteria (5/8)

Part Seven: Funding

1. The applicant shall **provide information on the proposed method of financing** (for e.g. example, revolving loan, equity financing, vendor financing, etc.)
2. The **cost of service rollout for the entire DTT infrastructure** to meet the coverage requirements of the CASPs at **no recourse to the Government**.

Part Eight: Industry Development

1. The applicant shall state its plans to contribute towards :
 - a) promotion **of Research and Development** activities;
 - b) development of **new innovative business models**;
 - c) promotion of **Small and Medium Enterprises/Industries**;
 - d) promotion of **human resource development**;
 - e) promotion and information on DTT service take up, establishment of a **customer service centre** (e.g. National Call Centre) **and branding of the DTT platform** to the consumers;
 - f) promotion of **Bumiputera participation** to be in line with 'Skim Jejak Jaya Bumiputera'.

SECTION TWO : Tender Evaluation Criteria (6/8)

Part Nine: Management

1. The applicant to state its **key management personnel and experience in broadcasting (5 years)** in the following areas, but not limited to:
 - a) business;
 - b) finance;
 - c) technical;
 - d) spectrum;
 - e) management of wholesale operations; and
 - f) managing migration of analogue to digital broadcasting.
2. Curriculum Vitae of management and technical team.

Part Ten: Consistency

The applicant shall show **traceability in its BP**. The BP shall be consistent in respect of its business case against technical and financial information including the overall articulation of its proposal.

SECTION THREE: Spectrum to be Assigned

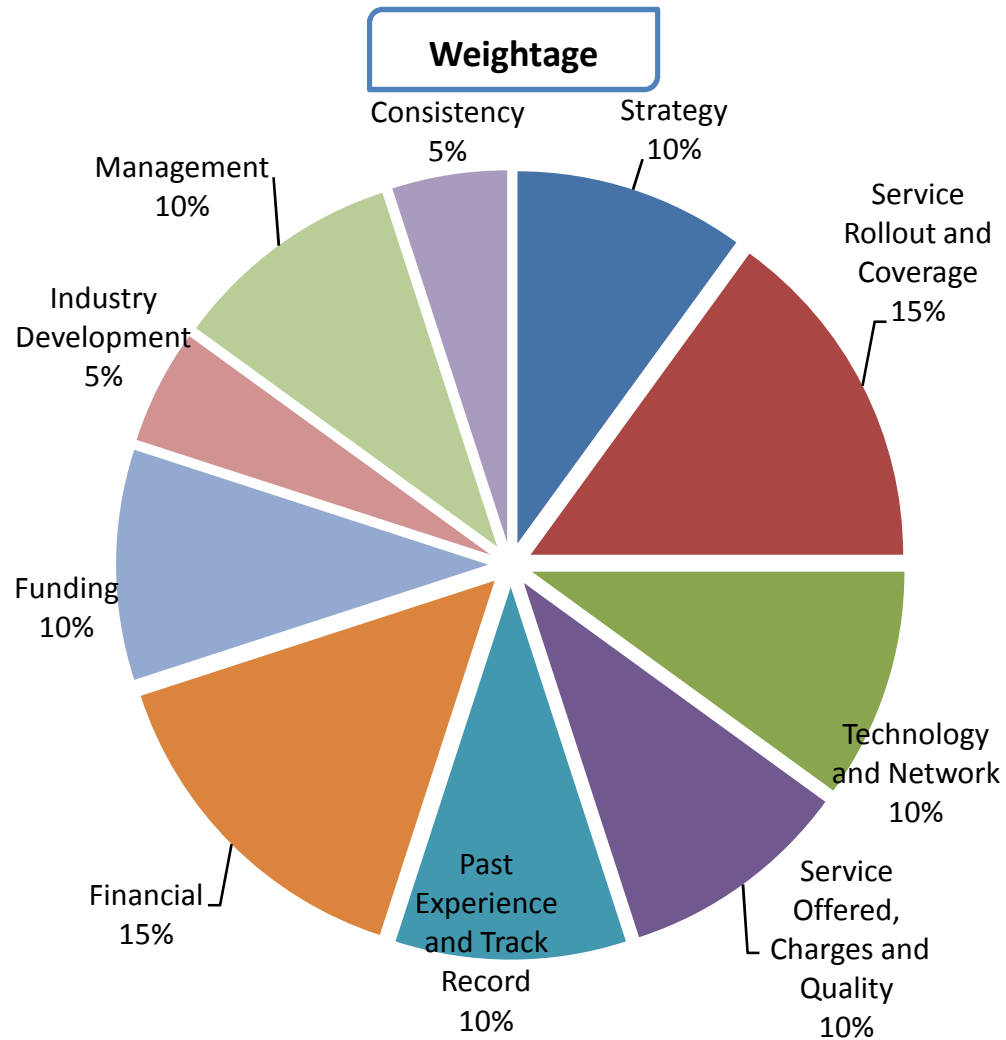
Applicants to **take note of several constraints in the spectrum allocated for DTT service** particularly due to:

- a) existing analogue broadcast service;
- b) other services in the broadcast band; and
- c) the spectrum allotment plan with neighbouring countries (Brunei Darussalam, Indonesia, Singapore and Thailand).

Although the band 470MHz to 742MHz is allocated to broadcasting, there is a possibility in the future to consider the broadcasting UHF band to be below 698MHz (Channel 49). In this regard, the applicant shall propose **two roll out options** using the following bands:

- a) **470 MHz– 742MHz**; and
- b) **470 MHz – 694MHz**; the restacking of channels to below 698MHz (Channel 49) shall include cost and timeline considerations.

SECTION FOUR: Basis of Initial Selection



Additional Information

The Commission **may request for any additional information in writing** from the applicants. The information requested is to be furnished to the Commission **within a timeframe** stipulated by the Commission.

Short Listing

The Commission shall, upon evaluation, **select a few applicants to be short listed** ("short listed applicants") for the submission of a Detailed Business Plan ("DBP").

SECTION FIVE: Submission of Detailed Business Plan (DBP)

Short listed applicants will be given **6 months from the date of announcement of the successful short listed** applicants by the Commission to submit their DBP.

In submitting the DBP, the short listed applicants will need to consider **the final requirements of the CASPs, provide on ground calculations, actual tower sites, coverage prediction map, among others.**

The DBP shall also include:

- a) the shortlisted **applicants' business plan for the entire duration of 15 years** from the date of announcement of successful applicant;
- b) **the review on the MUX plan, RF band**, channelling and allotment plan as stated in the SRSP; and
- c) may **propose a revised MUX plan**, RF band, channelling and allotment plan

SECTION SIX: Basis of Final Selection and Award

The basis of final selection and award shall **be based on the Evaluation Criteria for the initial BP.**

Upon completion of the evaluation on the DBP, the **Commission will announce the successful applicant who shall be required to apply for AA(s)** for the use of frequencies in the bands. The guidelines and application for the AA can be downloaded from www.skmm.gov.my

The Commission shall announce the successful applicant by **Q2 2013.**

SECTION SEVEN: Conditions to Assignment

The issuance of the AA(s) to the successful applicant pursuant to this AIP is **subject to** the full compliance of the following conditions:

- a) the AA(s) to be issued for the implementation of DTT service will **share the same spectrum band currently occupied by the current analogue TV CASPs** and other services
- b) **the first 5 years period of the DBP shall form a binding commitment of the successful applicant** to the Commission upon issuance of the AA(s) and any deviation there from may attract penalties as stipulated;
- c) **compliance to the rollout plan and other commitments** made pursuant to the DBP;
- d) shall **provide IBG from a licensed financial institution in Malaysia, for the amount of RM12,500,000.00 per MUX** in form and substance to be agreed by the Commission;
- e) **the successful applicant shall apply for an AA** for each apparatus in the geographic areas (SFN regions) and pay the application and assignment fees as prescribed in the Spectrum Regulations; and
- f) the successful applicant strictly comply with the **relevant provisions in the CMA 98, the Spectrum Regulations, the Mandatory Standard for Free to Air Transmission of Digital Terrestrial Television and any other legislations or instruments issued or may be issued by the Minister and/or the Commission from time to time.**

SECTION EIGHT: Non-compliance to the Conditions of Assignment

In **the event of non-compliance**, the Commission may:

- a) **suspend or cancel the entire AA(s)** issued to the successful applicant in accordance with regulation 12 of the Spectrum Regulations;
- b) **drawdown the IBG**; and/or
- c) exercise other provisions under the CMA 98

SECTION NINE: Conditions to Allocation of The MUX(s)

The successful applicant is allowed to allocate the capacity of the MUX and manage the bandwidth for the ASPs and CASPs subject to the following:

- a) **prior written approval** by the Commission; and
- b) **priority is to be given to the current Government and private FTA TV channels** until after ASO.

SECTION TEN

The application by the Eligible Person(s) shall consist of the following:

- a) **Letter of Application** (refer to the sample in Annex 6);
- b) **Tender Application Form** (refer to the sample in Annex 7);
- c) **Summary of application** which outlines the merits of the application;
- d) **The proposed Business Plan**;
- e) **Supporting Documents** as required in this AIP;
- f) **Supplementary Documents** to support applicant's proposals (if any); and
- g) **License Application Form for NSP(I) and NFP(I)** (if necessary).

Form of submission:

1. Provided in sealed envelopes in **6 sets of hard copy (including one original)**.
2. Shall also be submitted in **electronic form (CD-ROM)**.

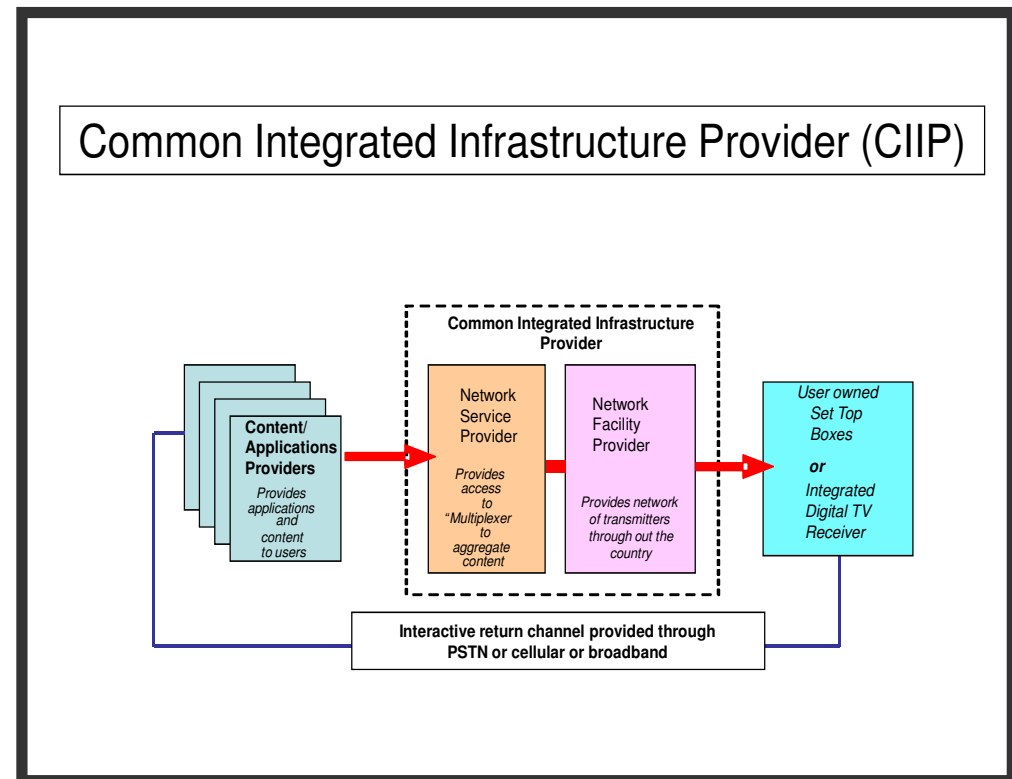
Tender Deposit Box (Marked "**Application for AA in UHF Band IV/V for DTT**") located at Commission's office:

The Malaysian Communications and Multimedia Commission
Off Persiaran Multimedia
63000 Cyberjaya
Selangor Darul Ehsan

ANNEX 2

- 1) The **Common Integrated Infrastructure Provider (CIIP)** - entity licensed under the CMA 1998 that shall **build, operate** and **own** the DTT infrastructure, comprising:
 - a) the Digital Multimedia Broadcasting Hub; and
 - b) nationwide transmission network

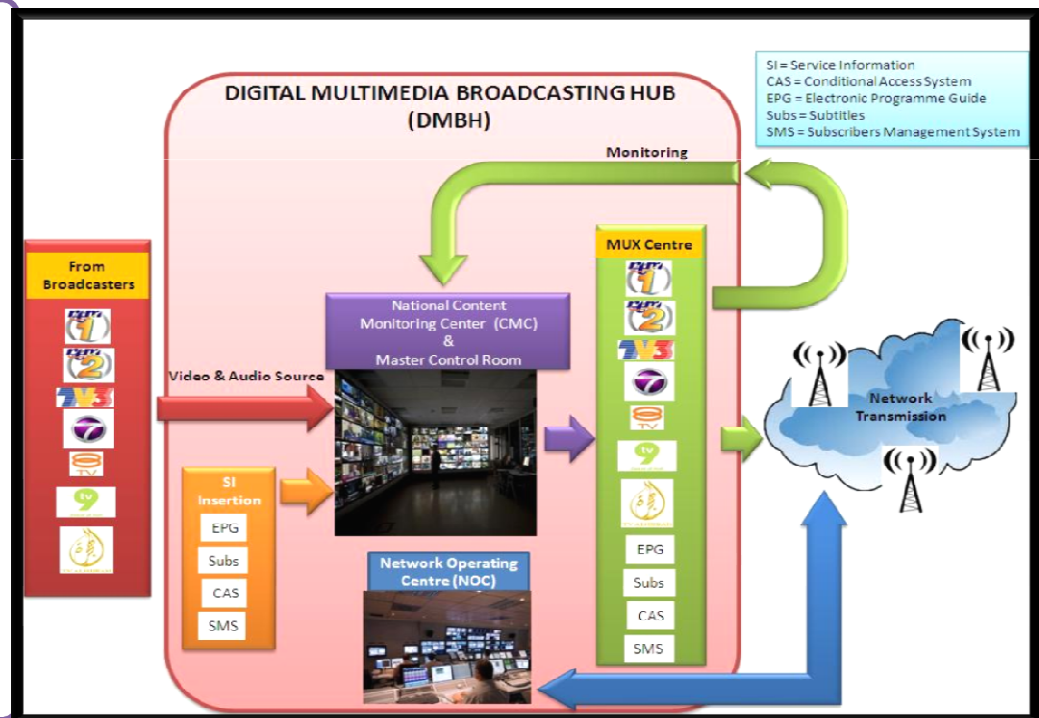
- 2) The CIIP performs the function of both the DTT Multiplex Service Provider and DTT Network Facilities Provider to serve the content and applications service providers.




ANNEX 2

- 1) The **Digital Multimedia Broadcasting Hub (DMBH)**, is a centre where all signals for digital broadcasting from the ASPs and CASPs are aggregated for the purpose of multiplexing, processing and monitoring by the Government before being transported to the transmission network.


2. The DMBH shall be designed with a special area and equipped with facilities to enable the following:
 - a) **monitoring and filtering of all incoming DTT applications and content from the ASPs and CASPs to the DMBH prior to be transported to the transmission network nationwide;** and
 - b) **the special area to be manned by the parties authorized by the Government.**




ANNEX 3


	2013						2014						2015						TOTAL													
	Number of Channels				Coverage By Region/Town						Number of Channels				Coverage By Region/Town						Number of Channels		Coverage By Region/Town						HD	SD		
	HD	SD	Interactivity	Others i.e Lite Pay, VOD	1	2	3	4	5	6	HD	SD	Interactivity	Others i.e Lite Pay, VOD	1	2	3	4	5	6	HD	SD	Interactivity	Others i.e Lite Pay, VOD	1	2	3	4			5	6
RTM :					75%										85%										98%							
TV 1		1	Y		Y	Y	Y	Y	Y	Y	1	Y		Y	Y	Y	Y	Y	Y	Y	1	Y			Y	Y	Y	Y	Y	Y		
TV 2		1	Y		Y	Y	Y	Y	Y	Y	1	Y		Y	Y	Y	Y	Y	Y	Y	1	Y			Y	Y	Y	Y	Y	Y		
New Channel 1		1	Y		Y	Y	Y	Y	Y	Y	1	Y		Y	Y	Y	Y	Y	Y	Y	1	Y			Y	Y	Y	Y	Y	Y		
New Channel 2		1	Y		Y	Y	Y	Y	Y	Y	1	Y		Y	Y	Y	Y	Y	Y	Y	1	Y			Y	Y	Y	Y	Y	Y		
New Channel 3		1	Y		Y	Y	Y	Y	Y	Y	1	Y		Y	Y	Y	Y	Y	Y	Y	1	Y			Y	Y	Y	Y	Y	Y		
New Channel 4		1	Y		Y	Y	Y	Y	Y	Y	1	Y		Y	Y	Y	Y	Y	Y	Y	1	Y			Y	Y	Y	Y	Y	Y		
New HD 1	1		Y		Y	Y	Y	Y	Y	Y	1	Y		Y	Y	Y	Y	Y	Y	Y	1	Y			Y	Y	Y	Y	Y	Y		
	1	6									1	6									1	6									1	6

ANNEX 3

	2013										2014										2015										TOTAL			
	Number of Channels				Coverage By Region/Town						Number of Channels				Coverage By Region/Town						Number of Channels				Coverage By Region /Town						HD	SD		
	HD	SD	Interactivity	Others i.e Lite Pay, VOD	1	2	3	4	5	6	HD	SD	Interactivity	Others i.e Lite Pay, VOD	1	2	3	4	5	6	HD	SD	Interactivity	Others i.e Lite Pay, VOD	1	2	3	4	5	6				
Media Prima:																																		
TV3		1	Y		Y	Y	Y	Y	Y	Y		1	Y		Y	Y	Y	Y	Y	Y		1	Y		Y	Y	Y	Y	Y	Y				
NTV7		1	Y		Y	Y	Y		Y	Y		1	Y		Y	Y	Y		Y	Y		1	Y		Y	Y	Y		Y	Y				
8TV		1	Y		Y	Y	Y		Y	Y		1	Y		Y	Y	Y		Y	Y		1	Y		Y	Y	Y		Y	Y				
TV9		1	Y		Y	Y	Y	Y				1	Y		Y	Y	Y	Y	Y	Y		1	Y		Y	Y	Y	Y	Y	Y				
HD	1		Y	Y	Y	Y	Y				1		Y	Y	Y	Y	Y				1		Y	Y	Y	Y	Y		Y	Y				
On-Line Channel		1		Y								1		Y								1		Y										
News Channel		1			Y	Y	Y	Y	Y	Y		1			Y	Y	Y	Y	Y	Y		1			Y	Y	Y	Y	Y	Y				
New Channel 1		1			TBA	TBA	TBA	TBA	TBA	TBA		1			TBA	TBA	TBA	TBA	TBA	TBA		1			TBA	TBA	TBA	TBA	TBA	TBA				
New Channel 2		1			TBA	TBA	TBA	TBA	TBA	TBA		1			TBA	TBA	TBA	TBA	TBA	TBA		1			TBA	TBA	TBA	TBA	TBA	TBA				
New Channel 3		1			TBA	TBA	TBA	TBA	TBA	TBA		1			TBA	TBA	TBA	TBA	TBA	TBA		1			TBA	TBA	TBA	TBA	TBA	TBA				
New Channel 4		1			TBA	TBA	TBA	TBA	TBA	TBA		1			TBA	TBA	TBA	TBA	TBA	TBA		1			TBA	TBA	TBA	TBA	TBA	TBA				
	1	10									1	10									1	10									1	10		

ANNEX 3

	2013									2014									2015									TOTAL					
	Number of Channels				Coverage By Region/Town					Number of Channels				Coverage By Region/Town					Number of Channels				Coverage By Region /Town										
	HD	SD	Interactivity	Others i.e Lite Pay, VOD	1	2	3	4	5	6	HD	SD	Interactivity	Others i.e Lite Pay, VOD	1	2	3	4	5	6	HD	SD	Interactivity	Others i.e Lite Pay, VOD	1	2	3	4	5	6	HD	SD	
WBC																																	
News International		1	Y		Y	Y	Y	Y	Y	Y		1	Y	N	Y	Y	Y	Y	Y	Y		1	Y	N	Y	Y	Y	Y	Y	Y	Y		
New Channel 1 (HD)	1		Y		Y	Y	Y	Y	Y	Y	1		Y		Y	Y	Y	Y	Y	Y		1	Y		Y	Y	Y	Y	Y	Y	Y		
New Channel 2											1	Y		Y	Y	Y	Y	Y	Y		1	Y		Y	Y	Y	Y	Y	Y	Y			
New Channel 3 (HD)																					1		Y	Y	Y	Y	Y	Y	Y	Y			
New Channel 4 (HD)																					1		Y		Y	Y	Y	Y	Y	Y			
New Channel 5 (HD)																					1		Y		Y	Y	Y	Y	Y	Y			
New Channel 6 (HD)																					1		Y		Y	Y	Y	Y	Y	Y			
New Channel 7 (HD)																					1		Y	Y	Y	Y	Y	Y	Y	Y			
	1	2									1	2									6	2									6	2	

	2013									2014									2015									TOTAL					
	Number of Channels				Coverage By Region/Town					Number of Channels				Coverage By Region/Town					Number of Channels				Coverage By Region /Town										
	HD	SD	Interactivity	Others i.e Lite Pay, VOD	1	2	3	4	5	6	HD	SD	Interactivity	Others i.e Lite Pay, VOD	1	2	3	4	5	6	HD	SD	Interactivity	Others i.e Lite Pay, VOD	1	2	3	4	5	6	HD	SD	
TV Al-Hijrah				50 %	75 %	60 %	50 %	40 %	40 %					75 %	98 %	75 %	75 %	60 %	60 %					85 %	98 %	85 %	75 %	75 %	75 %				
Current Channel		1	Y	N	Y	Y	Y	Y	Y		1	Y	N	Y	Y	Y	Y	Y	Y		1	Y	N	Y	Y	Y	Y	Y	Y	Y	Y		
New Channel 1	1		Y	N	Y	Y	Y	Y	Y	1		Y	N	Y	Y	Y	Y	Y	Y		1		Y	N	Y	Y	Y	Y	Y	Y	Y		
New Channel 2											1	Y	N	Y	Y	Y	Y	Y	Y		1	Y	N	Y	Y	Y	Y	Y	Y	Y			
	1	1									1	2									1	2									1	2	

ANNEX 3

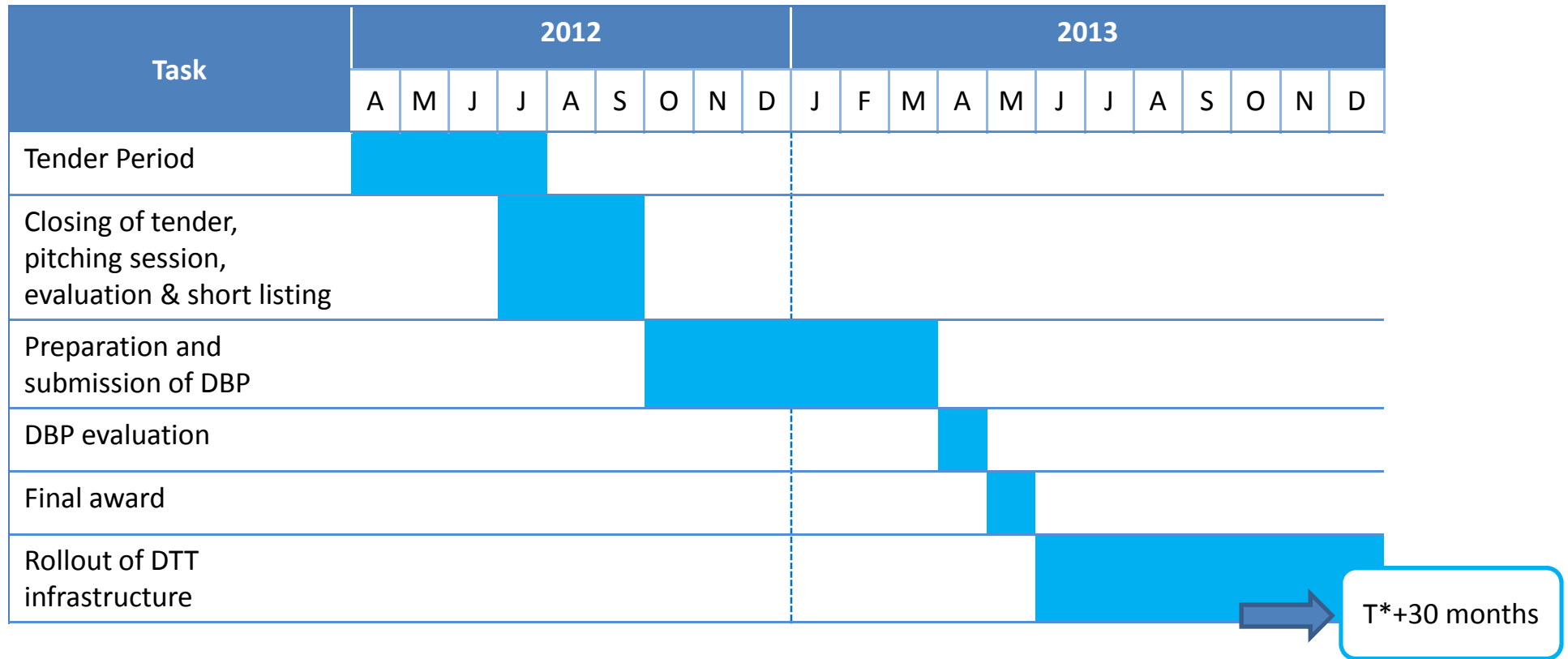
	2013								2014								2015								TOTAL							
	Number of Channels				Coverage By Region/Town				Number of Channels				Coverage By Region/Town				Number of Channels				Coverage By Region /Town											
	HD	SD	Interactivity	Others i.e Lite Pay, VOD	1	2	3	4	5	6	HD	SD	Interactivity	Others i.e Lite Pay, VOD	1	2	3	4	5	6	HD	SD	Interactivity	Others i.e Lite Pay, VOD	1	2	3	4	5	6	HD	SD
BernameTV																																
Current Channel		1	Y	N	Y	Y	Y	Y	Y		1	Y	N	Y	Y	Y	Y	Y	Y		1	Y	N	Y	Y	Y	Y	Y	Y			
	0	1								0	1										0	1									0	1

Total Number of Channels

CHANNELS

HD	SD
9	21

DTT IMPLEMENTATION TIMELINE



*T = date of award

Thank You



Malaysian Communication and Multimedia Commission
Off Persiaran Multimedia
63000 Cyberjaya
Selangor Darul Ehsan
Tel: +603-8688 8000
Fax: +603-8688 1000