



## ASMG- GE06 Plan overview and coordination meetings status

**Ilham Ghazi**

إلهام غازي

Head, Broadcasting services division  
Radiocommunication Bureau

[Ilham.ghazi@itu.int](mailto:Ilham.ghazi@itu.int)

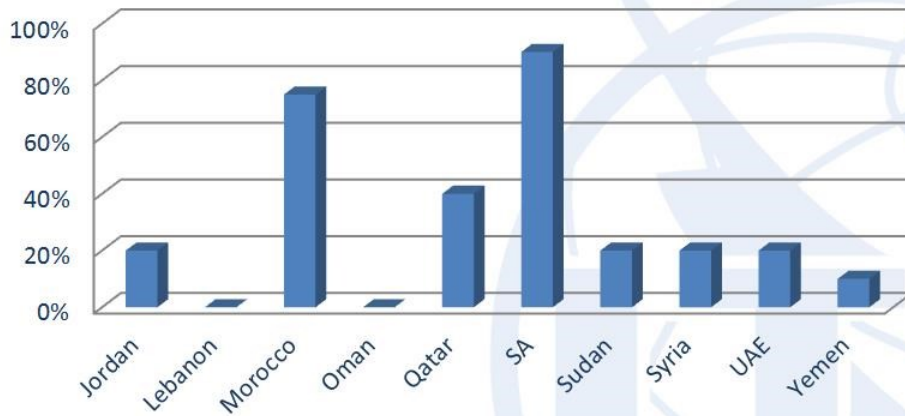
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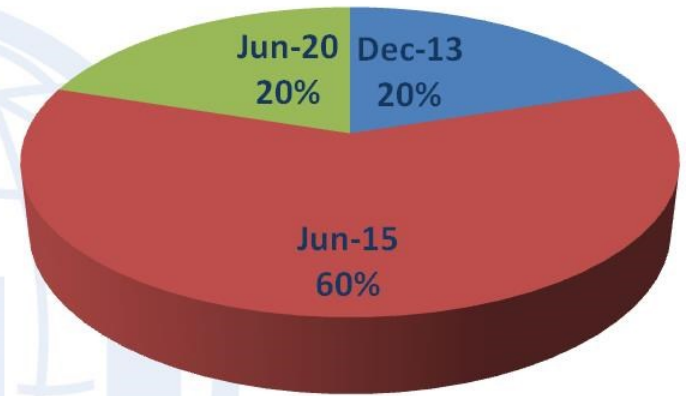
# DTT and DD in the Arab countries

(Questionnaire replies nov .2011 )

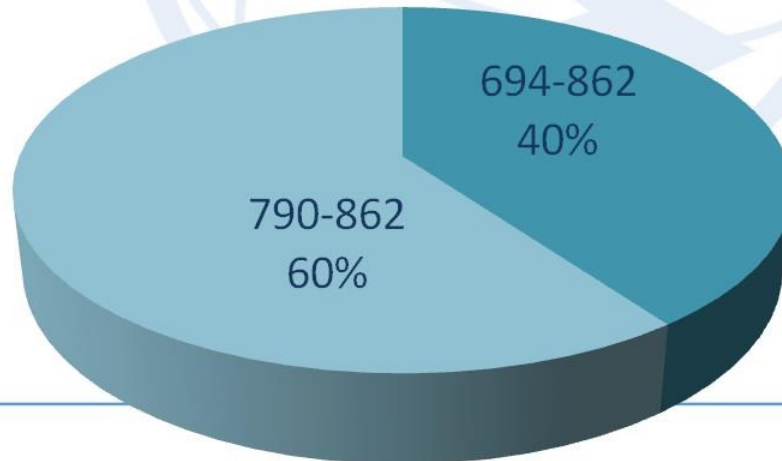
## Level of implementation of digital TV



## ASO date



## Identified DD (10 countries)



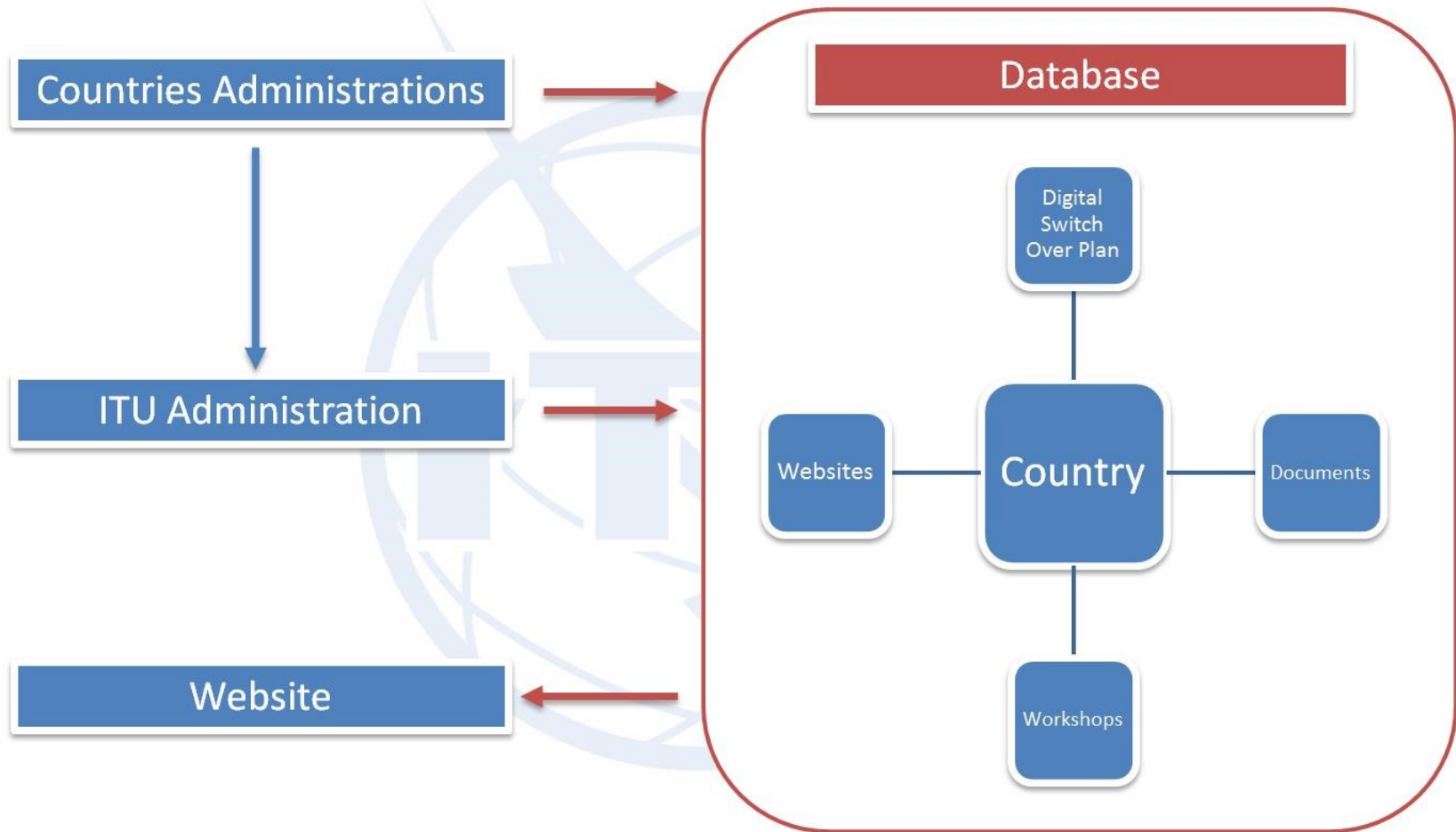


István BOZSÓKI, ITU/BDT/IEE/SBD  
Gaël JABOULAY, ITU/BDT/DDR/ITS



- Council 2014, 7 May, ITU-R Operational plan for 2015-2018
  - Comments from Kenya:  
the introduction of digital broadcasting is a key issue that needs to be addressed by policy-makers and that it would be important for ITU to provide an analogue to digital switchover stocktaking for assisting the Member States in their migration process.
- Group of BDT and BR experts for preparing the first version
- Designing the structure of the database and selecting tool for capturing and displaying the information
- Collecting information from relevant surveys, questionnaires of the ITU-D and ITU-R and other sources
- Entering information to the database
- Beta version in less than 2 weeks





<http://www.itu.int/en/ITU-D/Spectrum-Broadcasting/Pages/DSO/Default.aspx>

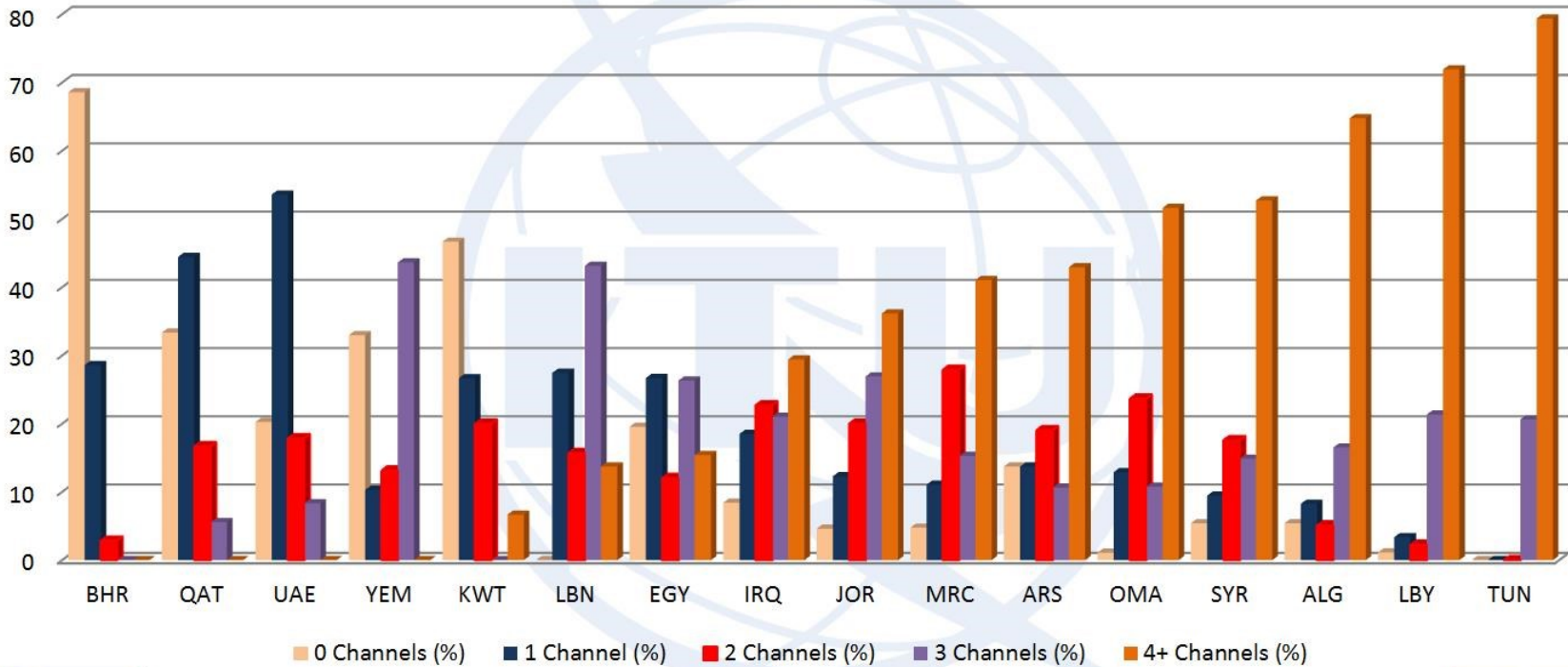


**GE06**

**status**



## Number of layers in GE06 Plan- May 2014



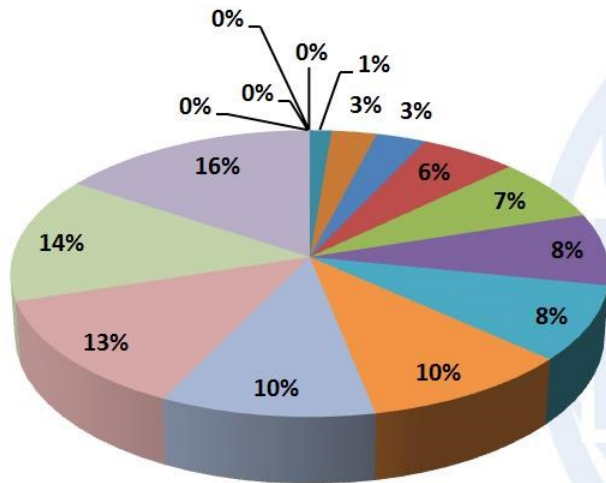
From Bad



To better

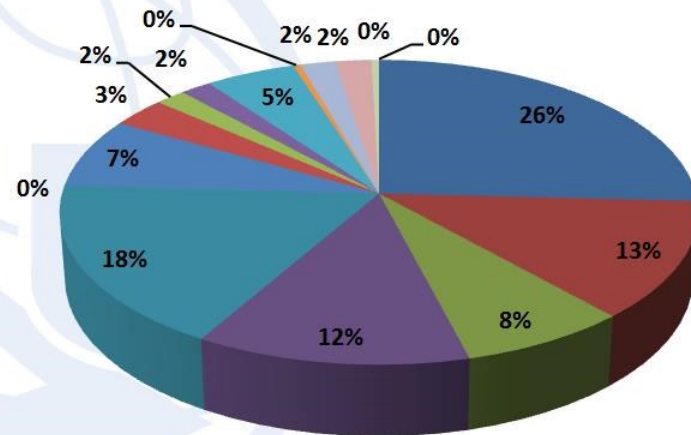
# Worst and best cases- Layers (GE06)

## 4+ Channels (%)



- BHR
- QAT
- UAE
- YEM
- KWT
- LBN
- EGY
- IRQ
- JOR
- MRC
- ARS
- OMA
- SYR

## 0 Channel (%)

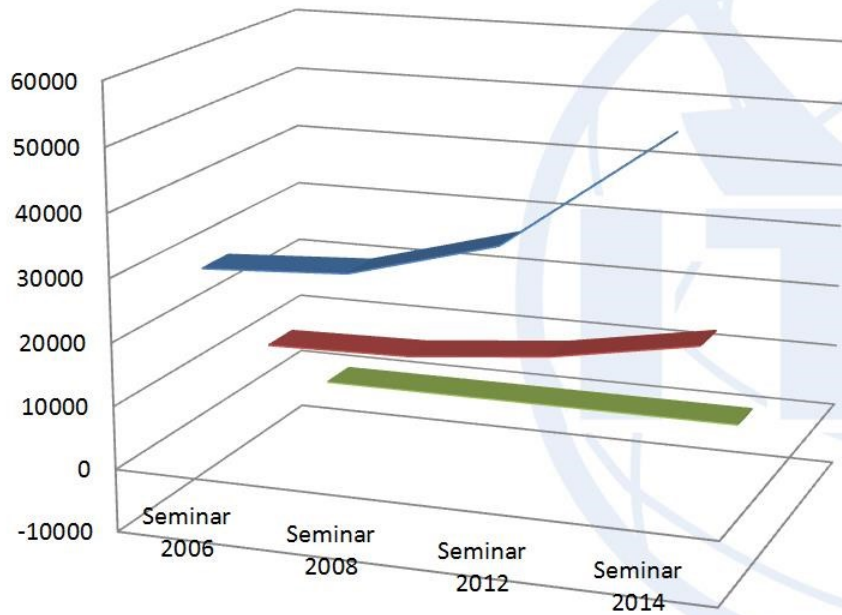


- BHR
- QAT
- UAE
- YEM
- KWT
- LBN
- EGY
- IRQ
- JOR
- MRC
- ARS
- OMA
- SYR

# GE06D Plan modification in the UHF Band

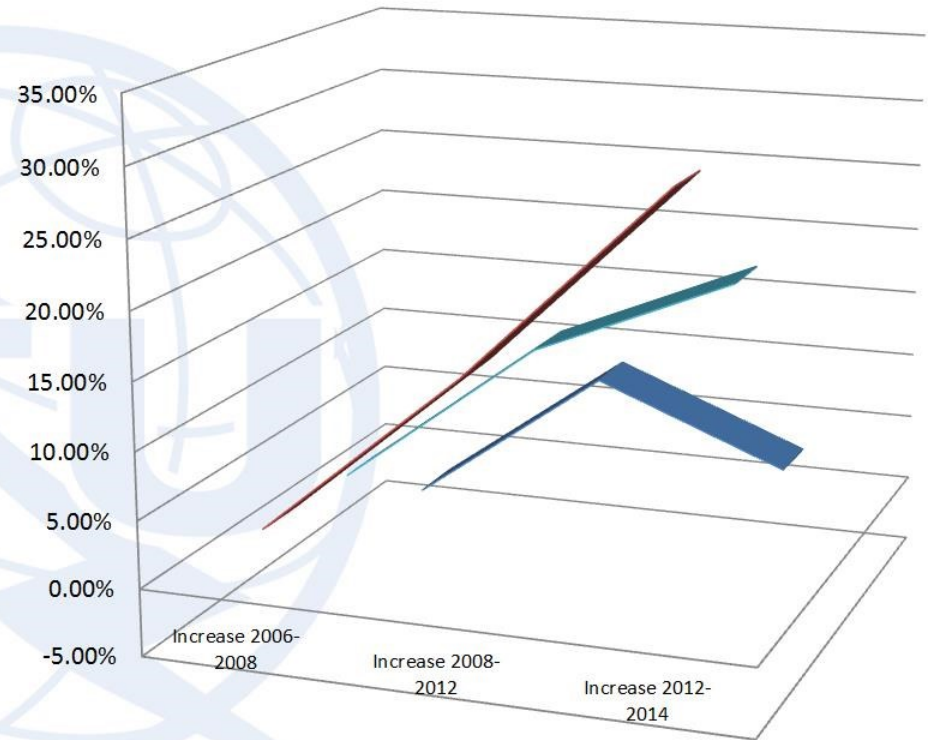
## Number of modification and (% of increase)

Evolution in the GE06D Plan (nbr of modification)



■ 470-694    ■ 694-790    ■ 790-862

GE06D Plan modification activity (% of increase)



	Increase 2006-2008	Increase 2008-2012	Increase 2012-2014
■ 470-694	3.85%	16.14%	30.32%
■ 694-790	3.51%	14.52%	20.62%
■ 790-862	-2.03%	8.48%	2.78%

**GE06**

**ASMG Planning**

**470-694 MHz**





## Recommendations and decisions of Dubai meeting (18-19 may 2014)

- Invite the Arab countries that did not start the introduction of DTT to use modern techniques for such service: DVB-T2/MPEG-4 or later.
- Maximum acceptable margin is :
  - **4dB**, this margin will be used in the coordination between the Arab countries, giving the freedom of States to use more or less stringent margins during bilateral coordination meetings .
  - **3 dB**: Tunisia, Saudi Arabia and Oman specified that for coordination with them, the maximum acceptable margin would be of 3dB concerning the channels recorded in the GE06 Plan and 4dB if against the requirements.
- 4 layers per Administration for this coordination period, knowing that this number can be increased in the future, individually, and according to the needs of the Arab states, according to GE06 Article 4 Procedures.
- An iteration each other Monday until the 3d meeting



# Recommendations and decisions of Dubai meeting-continued

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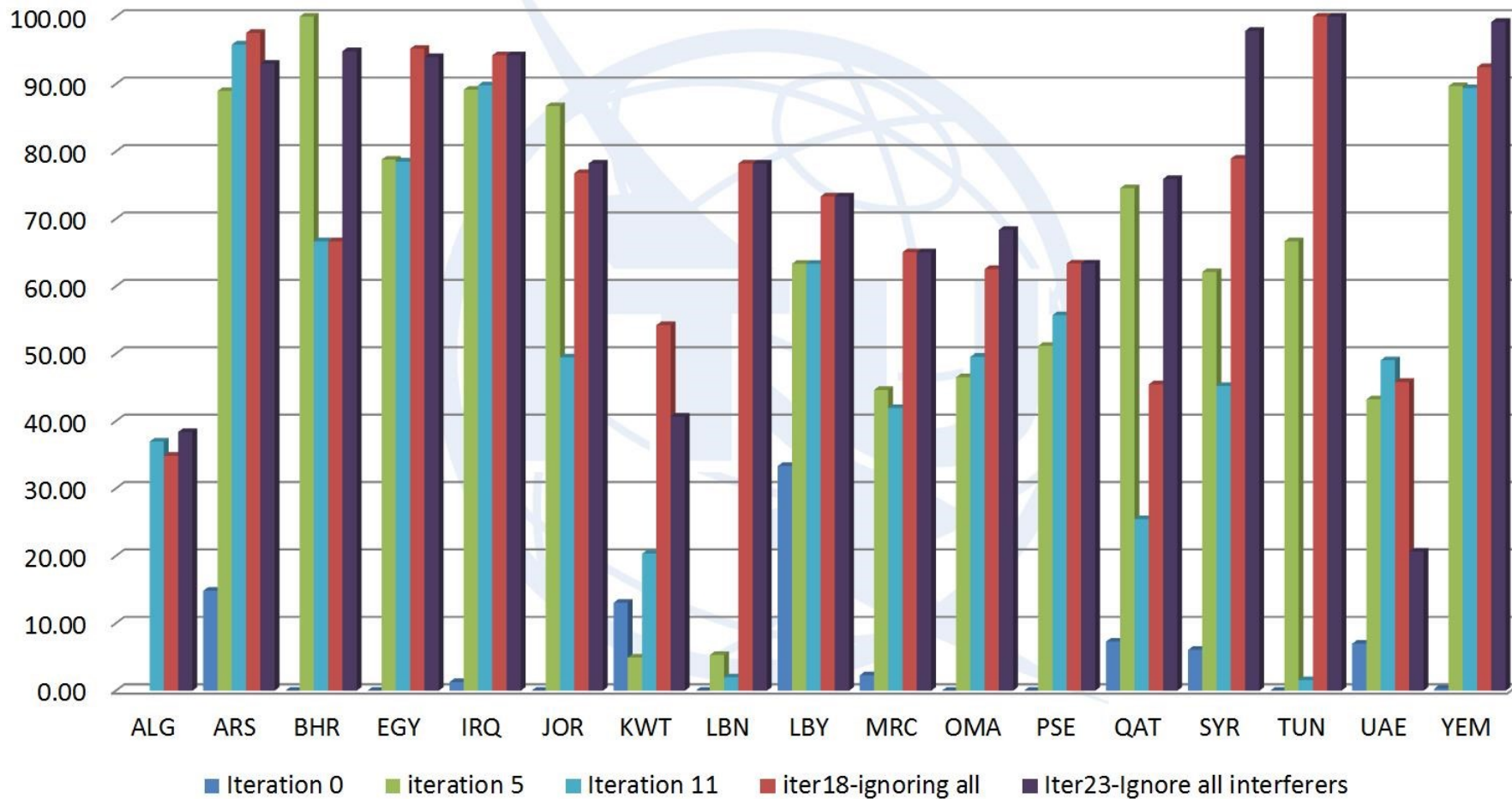
- Hold two coordination meetings as follows:
    - Second Coordination Meeting, will be held in Tunisia during September 2014.
    - Third Coordination Meeting will be held in Morocco during April 2015.
  - Arab administrations will not send any modification to the Geneva Plan 06 starting from the date of this meeting until the completion of the process of iterations (Feb 2015)
  - Creation of sub-regional groups as follows:
    - Group A : ( UAE , Bahrain , Saudi Arabia , Oman , Qatar , Kuwait , Iraq , Yemen).
    - Group B: (Saudi Arabia, Jordan, Syria, Palestine, Iraq, Lebanon, Egypt).
    - Group C: (Saudi Arabia, Egypt, Sudan, Djibouti, Somalia, the Comoros, Yemen, Libya).
    - Group D : (Libya, Algeria, Tunisia, Morocco, Mauritania)
-



# ASMG to the BR

- Ask the BR to invite the non-Arab countries that will be affected by the GE06 Plan modification to the next meeting planned in Tunisia-September 2014.
  - Done, however only Malta, France and UK were present.
- Invite the BR to take over the mediation and coordination process between Arab countries and Israel by convening a special meeting before the second ASMG meeting in Tunisia (29.9-1.10.2014-Geneva).
  - Meeting took place in Geneva. It was agreed with Israel that less than 1.25 dB is considered as coordinated.
- Request the BR to take in charge the requirements of the Arab countries that did not participate in Dubai meeting.
  - Done

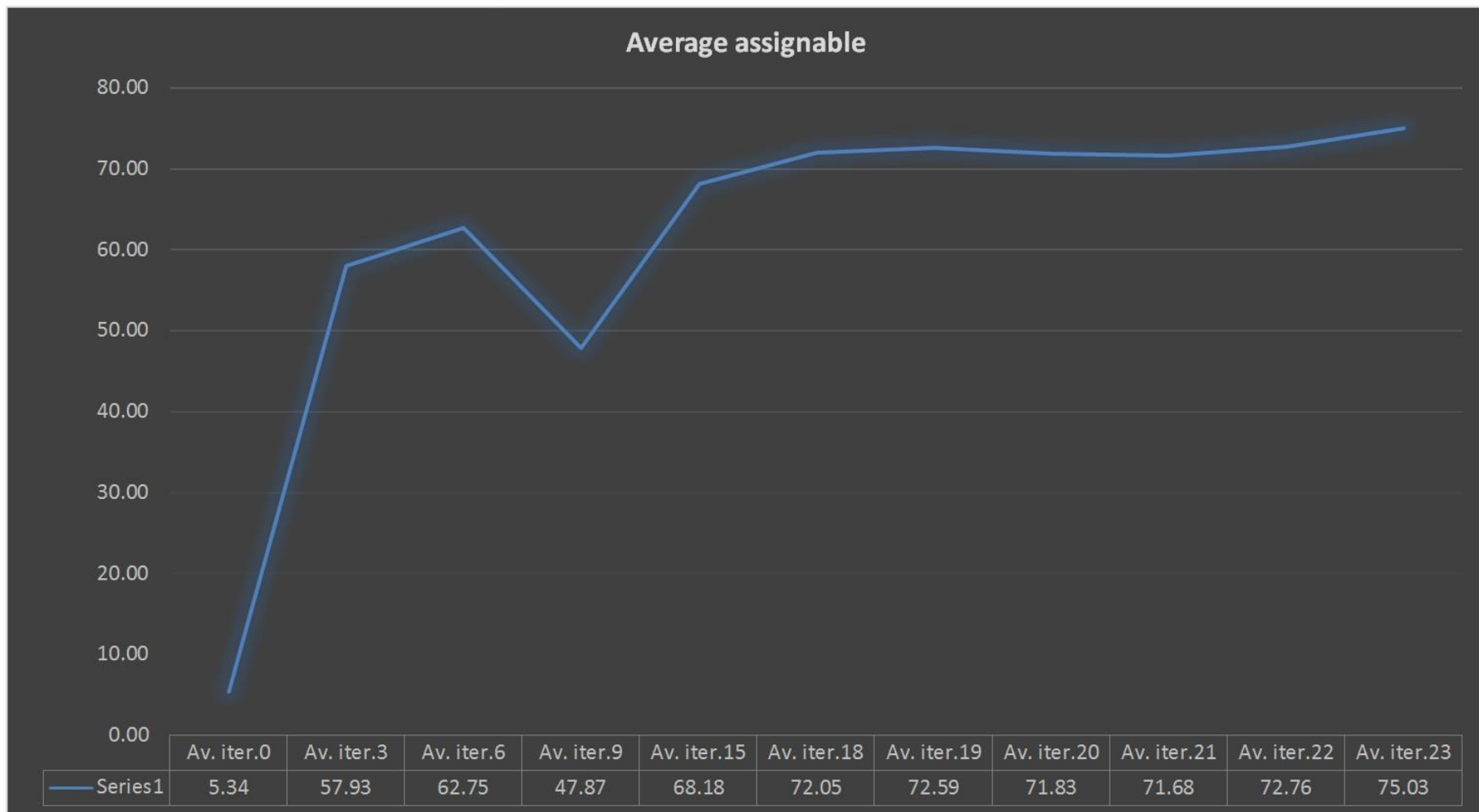
Evolution of assignable channels



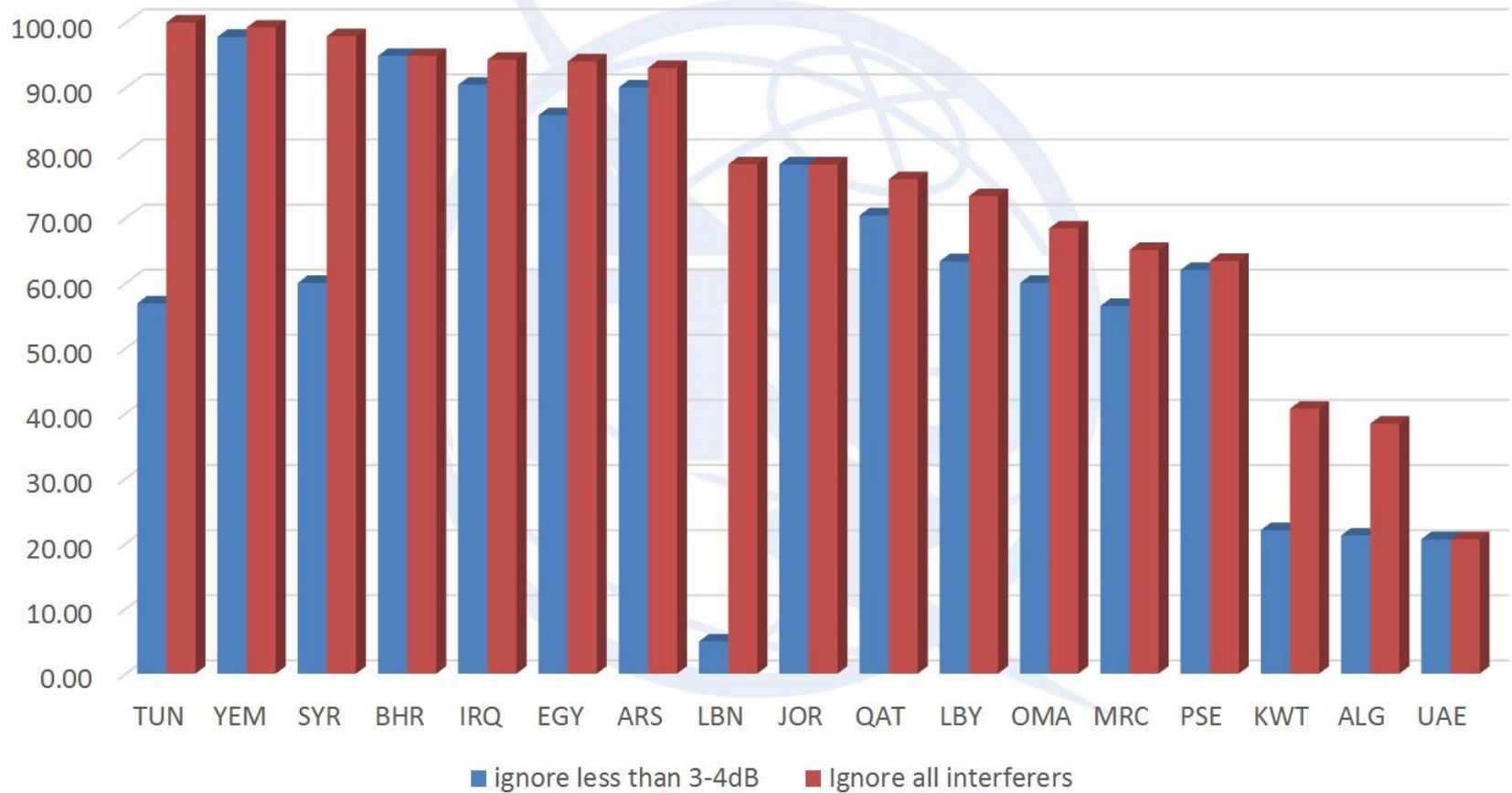




# Average of assignable channels



Iter23- Percentage of assignable channels



# General Analysis of the results

Excess number of added new requirements vs those generated by the BR

Number of submitted layers, in some cases, goes far beyond the agreed number of 4 layers per site/allotment in the frequency band 470-694 MHz. Some administrations have 6 or more channels, including Plan entries in this band.

The margin affecting Plan entries of other countries is often considerably exceeded, i.e. the interference level is much higher than the limits specified.

Received interference is also high in some cases!

Big number of cases of internal incompatibilities and Overlap between internal allotments and/or assignments (Plan and Requirements).

## Reasonable number of requirements

Decrease the number of requirements to the agreed number of layers, especially at the borders.

## Reasoning by coverage

Avoid submission of requirements with overlapping coverage areas due to close proximity of corresponding sites, including those recorded in the Plan. *Ex. Overleaping allotments and single assignments.*

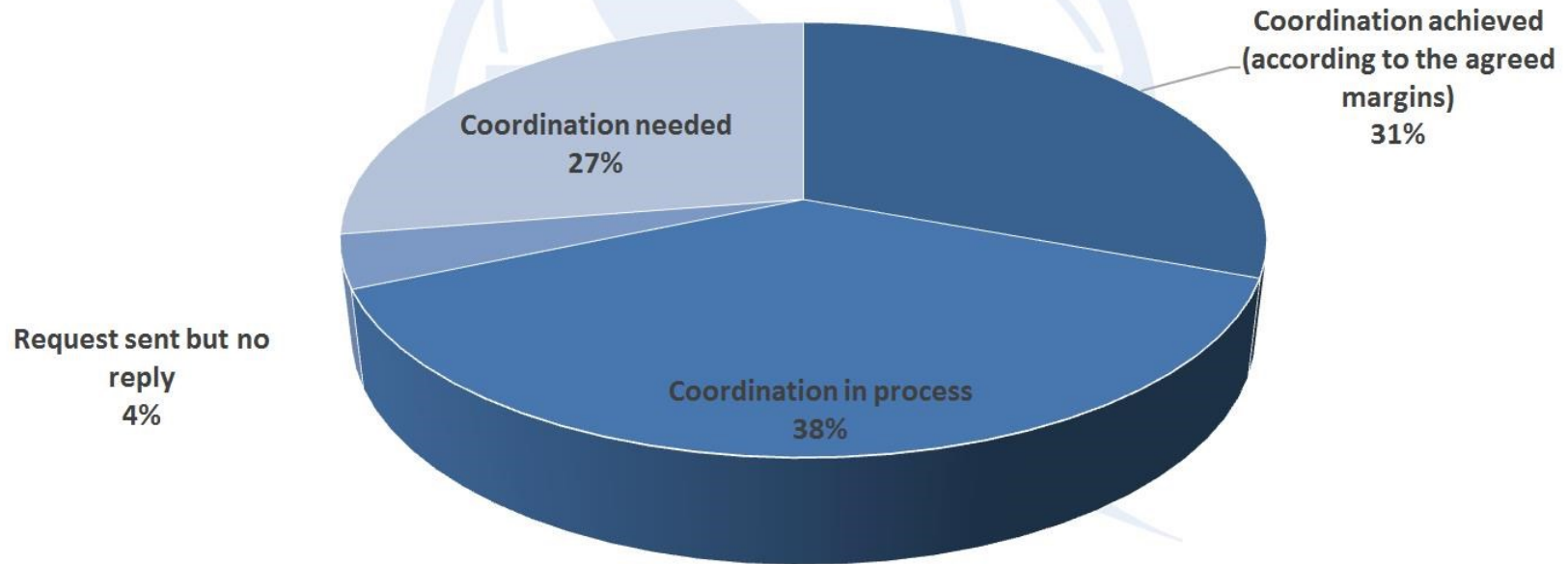
## Reduce interference

Modify technical parameters of requirements for sites/allotments not having assignable channels.  
Coordinate sites/allotments with the affected administrations using more detailed calculation methods, for example taking into account terrain peculiarities and/or relaxed margins.  
Transfer of a channel from another requirement, if more than 4 layers

Bilateral coordination within ASMG  
and with administrations outside ASMG



## Coordination status (inside and outside ASMG)





# Snapshot from coordination table- February 2015

Country	ALG	ARS	BHR	EGY	IRQ	JOR	KWT	LBN	LBY	MRC	OMA	PSE	QAT	SYR	TUN	UAE	YEM
ALG	1									2					2		
ARS			2	1	1	1	2				2	1	2	2		2	1
BHR		2			2		2				2		2			2	
CYP				3				2	4			3		4			
DJI		4														2	4
E	2									1							
EGY		1				1		1	2			1					
ERI		4		4													4
ETH																	4
F	2																
G	2									1							
GRC				4					4								
I	2								4						4		
IRN		4	4		4		4				4		4			4	
IRQ		2	2			1	2						2	4		2	
ISR		4		4		4		4				4					
JOR		1		1	1			1				1		1			
KWT		2	2		2								2			2	
LBN				1		1						1		1			
LBY	4			1											1		
MCO	4																
MLT									4							4	
MRC	2																
MTN	2																
OMA		2	2										2			2	1
POR										1							
PSE		1		1		1		1						1			
QAT		2	2		2		2				2					2	
SDN		4		2													4
SOM																	4
SYR				1	4	1		1				1					
TUN	2								1								

To be updated in this meeting!





# Timeline and activities

Iterations/Activity	Meeting place	Dates
Tools and Planning criteria	1st ASMG/ITU meeting Dubai-UAE 18-20/5/2014	18/5/14
Channel search and coord.		19/5/14
Results analysis, channel search and coord.		20/5/14
Iteration 1		9/6/14
Iteration 2		23/6/14
Iteration 3		7/7/14
Iteration 4		21/7/14
---		4/8/14
Iteration 5		18/8/14
Iteration 6		1/9/14
Results analysis, channel search and coord.	2nd ASMG/ITU meeting Hammamet 8-9/9/14: Only ASMG 10-12/9/14: ASMG+neighbors not member of ASMG	8/9/14
7		9/9/14
Results analysis, channel search and coord.		10/9/14
8		11/9/14
Results analysis, channel search and coord.		12/9/14
Iteration 9		15/9/14
Iteration 10		29/9/14
Iteration 11		13/10/14
Iteration 12		27/10/14
Iteration 13		10/11/14
Iteration 14		24/11/14
Iteration 15		8/12/14
Iteration 16		22/12/14
Iteration 17		5/1/15
Iteration 18		19/1/15
Iteration 19		2/2/15
Iteration 20		16/2/15
Iteration 21		2/3/15
Iteration 22		16/3/15
Iteration 23		30/3/15
Opening, general presentations, status... Iteration 24	3d ASMG/ITU meeting Marrakech: 13-17/4/2015 ASMG+neighbors not member of ASMG	13/4/15
25		14/4/15
26		15/4/15
Final results analysis, GE06 Article 4 Plan modification, futur recommendations...		16/4/15

**GE06 Plan modification**



Thank you for your attention

شكرا لاهتمامكم

Ilham Ghazi

إلهام غازي

BR/ITU