



ITU Regional Workshop on Cross Border Frequency Coordination in Arab Region

# Cross Border Coordination Palestine

Samer Ali Ministry of Telecom and IT

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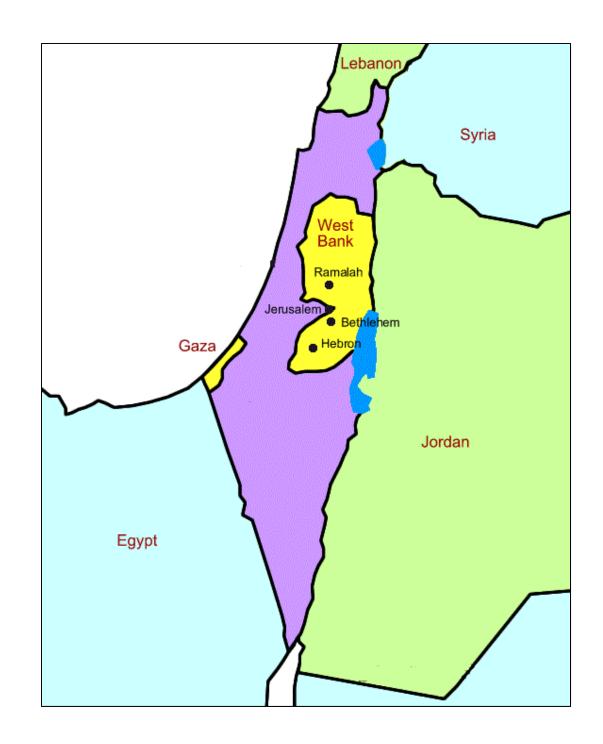
### Outline

- ✓ Palestine Frequency Spectrum
- ✓ Geographic Overview
- ✓ GE06 Coordination
- ✓ 3G / 2100 MHz Harmonization Agreement
- ✓ Interference

### Introduction

- Current situation in Palestine Frequency Spectrum
- 2 Mobile Operators still running 2G networks
- 3.5 million Mobile subscribers
- 5 MHz for each operator only
- 1st operator in West Bank & Gaza 2nd Operator only in West Bank
- Analogue Broadcasting
- Digital Broadcasting

# Geographic Overview



# Geographic Overview

- Geographic discontinuity
- Difficulties in infrastructure building and fiber lying means more reliance on Microwave & Wireless Loops
- Great Example of Frequency Reuse
- Difficult Harmonization
- Many cases of interference





#### GE06D

- Palestine is part of the Geneva 06 agreement
- 239 assignments/allotments were coordinated and recorded in 2006
- 167 Digital TV and 72 Digital Sound
- 59 of the 167 DTT entries located in Digital Dividend 1 & 2

### ASMG Digital Terrestrial TV Coordination

- In May 2014 Palestine attended the 1<sup>st</sup> ASMG DTT Coordination meeting in Dubai
- Administrations were asked to submit their DTT requirements to compensate the entries located in Digital Dividend 1&2
- 27 iteration were conducted over a year of search, calculation and coordination
- 70 requirements were submitted by the administration of Palestine
- Coordination agreements were done with Jordan, Syria, Lebanon, Egypt, Cyprus and Turkey
- The result was 55 successful entries recorded
- 15 are still pending

#### GE06L Mobile

- Plan for 800 MHz
- Around 2000 G13 assignments were submitted and published in GE06L/19 BRIFIC 2806 (27/10/2015)
- A resubmission was done after reducing the coverage and adding more entries located in digital dividend 2 after WRC15
- Published in GE06L/20 BRIFIC 2816 (29/3/2016)
- 10 neighboring administrations were affected
- After coordination
- 7 agreed and 3 objected

### 3G / 2100 MHz Harmonization Agreement

- In 2006 a second mobile operator was licensed in Palestine and the license included 3G but until now both operators are only offering 2G services because of occupation not releasing frequencies and blocking the import of network equipments.
- the 2<sup>nd</sup> operator is blocked in Gaza.
- In WRC15 and sponsored by ITU Secretary-General Mr Houlin Zhao, an agreement of principles was reached between Palestine and the occupation authority to release the 3G frequencies for both Palestinian operators.
- 10 MHz in band 2100 were allocated for each operator, 5 exclusive and 5 shared with an Israeli company.
- a 3<sup>rd</sup> party company will be responsible of shared frequency coordination because of service areas overlap.

#### **Interference Cases**

- Interference situations either be affected by or affecting a neighboring country is dealt with at once.
- Starting by contacting the neighbor administration and following procedures agreed by both administrations and compatible with ITU recommendations
- Example: Coordination Agreement to limit harmful interference and through border coverage between Mobile Networks in Egypt & Palestine 14.3.2012
- Measurement and scan is conducted to analyze the problem.
- Suitable measures is followed to end the interference

## THANK YOU

Samer Ali International Spectrum Coordination Director Palestine Ministry of Telecom & IT <a href="mailto:samer.ali@mtit.pna.ps">samer.ali@mtit.pna.ps</a>

