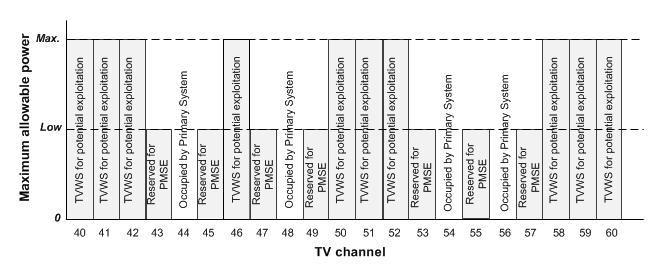
Spectrum για το σενάριο

* Το φάσμα αποτελείται από 21 channels.
* Τα κανάλια 44,48,54 και 56 είναι κατηλλημένα από DVB-T, οπότε και δεν τα πειράζουμε.
* Τα κανάλια 43,45,47,49,53,55,57 είναι ελεύθερα για εκπομπή συστημάτων με 2 watt power.
* Τα κανάλια 40,41,42,46,50,51,52,58,59,60 είναι ελέυθερα για εκπομπή συστημάτων με 4 watt power.

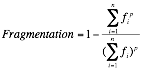


Secondary systems gia scenario. Σε κάθε μια νέα χρονική στιγμή ένα νέο LTE εισέρχετε στο φάσμα.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Number of Secondary System** | **Power (Watt)** | **Bandwidth (MHz)** | **Time period start** | **Time period end** |
| 1st LTE | 4 | 5 | 1 | 10 |
| 2nd LTE | 4 | 5 | 2 | 10 |
| 3rd LTE | 4 | 5 | 3 | 10 |
| 4th LTE | 4 | 5 | 4 | 10 |
| 5th LTE | 4 | 5 | 5 | 10 |
| 6th LTE | 4 | 5 | 6 | 10 |
| 7th LTE | 4 | 5 | 7 | 10 |
| 8th LTE | 4 | 5 | 8 | 10 |
| 9th LTE | 4 | 5 | 9 | 10 |
| 10th LTE | 4 | 5 | 10 | 10 |

Έστω ότι το παρακατω σχήμα δείχνει το 1ο allocation. Για να



*  , όπου n το πλήθος των fragments, fi το μέγεθος των fragments και p=2.
* Spectrum Utilization (%) = BW exploited by all systems (in MHz) / 168MHz
* BW exploited by all systems (in MHz): περιέχει και τα DVB-T και τα secondary systems που γίνονται allocate.

40a: slot available with 4W available

40b: slot available with 4W available

40c: slot available with 4W available

40d: slot available with 4W available

40e: slot available with 4W available

40f: slot available with 4W available

40g: slot available with 4W available

40h: slot available with 4W available

41a: slot available with 4W available

41b: slot available with 4W available

41c: slot available with 4W available

41d: slot available with 4W available

41e: slot available with 4W available

41f: slot available with 4W available

41g: slot available with 4W available

41h: slot available with 4W available

42a: slot available with 4W available

42b: slot available with 4W available

42c: slot available with 4W available

42d: slot available with 4W available

42e: slot available with 4W available

42f: slot available with 4W available

42g: slot available with 4W available

42h: slot available with 4W available

43a: service: 'TV(ID:43)' running on 1W

43b: service: 'TV(ID:44)' running on 1W

43c: service: 'TV(ID:45)' running on 1W

43d: service: 'TV(ID:46)' running on 1W

43e: service: 'TV(ID:47)' running on 1W

43f: service: 'TV(ID:48)' running on 1W

43g: service: 'TV(ID:49)' running on 1W

43h: service: 'TV(ID:50)' running on 1W

44a: service: 'TV(ID:51)' running on 1W

44b: service: 'TV(ID:52)' running on 1W

44c: service: 'TV(ID:53)' running on 1W

44d: service: 'TV(ID:54)' running on 1W

44e: service: 'TV(ID:55)' running on 1W

44f: service: 'TV(ID:56)' running on 1W

44g: service: 'TV(ID:57)' running on 1W

44h: service: 'TV(ID:58)' running on 1W

45a: service: 'TV(ID:59)' running on 1W

45b: service: 'TV(ID:60)' running on 1W

45c: service: 'TV(ID:61)' running on 1W

45d: service: 'TV(ID:62)' running on 1W

45e: service: 'TV(ID:63)' running on 1W

45f: service: 'TV(ID:64)' running on 1W

45g: service: 'TV(ID:65)' running on 1W

45h: service: 'TV(ID:66)' running on 1W

46a: service: 'LTE DL(ID:1)' running on 4W

46b: service: 'LTE DL(ID:1)' running on 4W

46c: service: 'LTE DL(ID:1)' running on 4W

46d: service: 'LTE DL(ID:1)' running on 4W

46e: service: 'LTE DL(ID:1)' running on 4W

46f: service: 'GI(ID:187)' running on 0W

46g: slot available with 4W available

46h: slot available with 4W available

47a: service: 'TV(ID:75)' running on 0.05W

47b: service: 'TV(ID:76)' running on 0.05W

47c: service: 'TV(ID:77)' running on 0.05W

47d: service: 'TV(ID:78)' running on 0.05W

47e: service: 'TV(ID:79)' running on 0.05W

47f: service: 'TV(ID:80)' running on 0.05W

47g: service: 'TV(ID:81)' running on 0.05W

47h: service: 'TV(ID:82)' running on 0.05W

48a: service: 'TV(ID:83)' running on 1W

48b: service: 'TV(ID:84)' running on 1W

48c: service: 'TV(ID:85)' running on 1W

48d: service: 'TV(ID:86)' running on 1W

48e: service: 'TV(ID:87)' running on 1W

48f: service: 'TV(ID:88)' running on 1W

48g: service: 'TV(ID:89)' running on 1W

48h: service: 'TV(ID:90)' running on 1W

49a: service: 'TV(ID:91)' running on 1W

49b: service: 'TV(ID:92)' running on 1W

49c: service: 'TV(ID:93)' running on 1W

49d: service: 'TV(ID:94)' running on 1W

49e: service: 'TV(ID:95)' running on 1W

49f: service: 'TV(ID:96)' running on 1W

49g: service: 'TV(ID:97)' running on 1W

49h: service: 'TV(ID:98)' running on 1W

50a: slot available with 4W available

50b: slot available with 4W available

50c: slot available with 4W available

50d: slot available with 4W available

50e: slot available with 4W available

50f: slot available with 4W available

50g: slot available with 4W available

50h: slot available with 4W available

51a: slot available with 4W available

51b: slot available with 4W available

51c: slot available with 4W available

51d: slot available with 4W available

51e: slot available with 4W available

51f: slot available with 4W available

51g: slot available with 4W available

51h: slot available with 4W available

52a: slot available with 4W available

52b: slot available with 4W available

52c: slot available with 4W available

52d: slot available with 4W available

52e: slot available with 4W available

52f: slot available with 4W available

52g: slot available with 4W available

52h: slot available with 4W available

53a: service: 'TV(ID:123)' running on 0.5W

53b: service: 'TV(ID:124)' running on 0.5W

53c: service: 'TV(ID:125)' running on 0.5W

53d: service: 'TV(ID:126)' running on 0.5W

53e: service: 'TV(ID:127)' running on 0.5W

53f: service: 'TV(ID:128)' running on 0.5W

53g: service: 'TV(ID:129)' running on 0.5W

53h: service: 'TV(ID:130)' running on 0.5W

54a: service: 'TV(ID:131)' running on 0.5W

54b: service: 'TV(ID:132)' running on 0.5W

54c: service: 'TV(ID:133)' running on 0.5W

54d: service: 'TV(ID:134)' running on 0.5W

54e: service: 'TV(ID:135)' running on 0.5W

54f: service: 'TV(ID:136)' running on 0.5W

54g: service: 'TV(ID:137)' running on 0.5W

54h: service: 'TV(ID:138)' running on 0.5W

55a: service: 'TV(ID:139)' running on 0.5W

55b: service: 'TV(ID:140)' running on 0.5W

55c: service: 'TV(ID:141)' running on 0.5W

55d: service: 'TV(ID:142)' running on 0.5W

55e: service: 'TV(ID:143)' running on 0.5W

55f: service: 'TV(ID:144)' running on 0.5W

55g: service: 'TV(ID:145)' running on 0.5W

55h: service: 'TV(ID:146)' running on 0.5W

56a: service: 'TV(ID:147)' running on 0.5W

56b: service: 'TV(ID:148)' running on 0.5W

56c: service: 'TV(ID:149)' running on 0.5W

56d: service: 'TV(ID:150)' running on 0.5W

56e: service: 'TV(ID:151)' running on 0.5W

56f: service: 'TV(ID:152)' running on 0.5W

56g: service: 'TV(ID:153)' running on 0.5W

56h: service: 'TV(ID:154)' running on 0.5W

57a: service: 'TV(ID:155)' running on 0.5W

57b: service: 'TV(ID:156)' running on 0.5W

57c: service: 'TV(ID:157)' running on 0.5W

57d: service: 'TV(ID:158)' running on 0.5W

57e: service: 'TV(ID:159)' running on 0.5W

57f: service: 'TV(ID:160)' running on 0.5W

57g: service: 'TV(ID:161)' running on 0.5W

57h: service: 'TV(ID:162)' running on 0.5W

58a: slot available with 4W available

58b: slot available with 4W available

58c: slot available with 4W available

58d: slot available with 4W available

58e: slot available with 4W available

58f: slot available with 4W available

58g: slot available with 4W available

58h: slot available with 4W available

59a: slot available with 4W available

59b: slot available with 4W available

59c: slot available with 4W available

59d: slot available with 4W available

59e: slot available with 4W available

59f: slot available with 4W available

59g: slot available with 4W available

59h: slot available with 4W available

60a: slot available with 4W available

60b: service: 'GI(ID:187)' running on 0W

60c: service: 'LTE UL(ID:2)' running on 4W

60d: service: 'LTE UL(ID:2)' running on 4W

60e: service: 'LTE UL(ID:2)' running on 4W

60f: service: 'LTE UL(ID:2)' running on 4W

60g: service: 'LTE UL(ID:2)' running on 4W

60h: service: 'GI(ID:187)' running on 0W

fragmentation: 0.696939

slot utilization: 0.6125

Solutions explored: 3230