ANNEX A · WI-FI SITE SURVEY

Name _____ **Group G =** _____ **Date** _____

TASK 1 · SCAN AND TALLY

1. In WinBox: WiFi (or Wireless) → select the 2.4 GHz interface → **Scan**. Wait 30 seconds, then stop. In the CLI: `/interface wifi scan wifi1` or `/interface wireless scan wlan1`, stop with `Q`.
2. For each line of the scan, turn the frequency into a channel: **channel = (MHz − 2407) ÷ 5**. Put one mark in that channel's box. Under it, write the strongest signal you heard on that channel.

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13
MHz	2412	2417	2422	2427	2432	2437	2442	2447	2452	2457	2462	2467	2472
Marks													
Strongest (dBm)													

3. Draw one bar per channel: height = number of access points.

Access points per channel (write the scale on the left, channels 1–13 along the bottom)

4. Answer with your numbers:

Most crowded channel, and how many access points _____

Access points on a channel that is not 1, 6 or 11 _____

Strongest signal that is not a classmate's `TRAM-…` network (dBm, channel) _____

How many BSSIDs announce the school's network name _____

If you have a 5 GHz radio: access points heard at 5 GHz _____

DONE WHEN your table has a mark for every line of the scan and the chart shows where the crowd is.

TASK 2 · DECIDE, AGREE, APPLY, CHECK

Our proposal for our access point: channel _____ Channel agreed with the class: _____

Because (use your numbers; count only signals stronger than −75 dBm): _____

_____

Neighbouring group's network	Before: channel · signal (dBm)	After: channel · signal (dBm)
TRAM-		
TRAM-		

DONE WHEN your access point is on the agreed channel and a second scan shows your neighbours on a different channel or weaker than before.

EXIT TICKET (ALONE, NO NOTES)

1. An access point transmits on 2462 MHz. Its channel is: A · 6 B · 11 C · 13 D · 36
2. A BSSID is:
   A · the name of the network B · the password C · the MAC address of one access point's radio D · the channel
3. The same SSID appears five times in a scan, with five BSSIDs. That means:
   A · several access points announce the same network B · five people are connected
   C · the scan is wrong D · the network uses five passwords
4. You hear: channel 1 → two networks at −45 dBm; channel 6 → one at −50 and six at −88; channel 11 → four at −86.
   The best channel for your access point is: A · 1 B · 3 C · 6 D · 11
5. In one sentence: why can **lowering** the power of every access point in a room make the Wi-Fi better?