

eCall Host Lab Presentation of Results



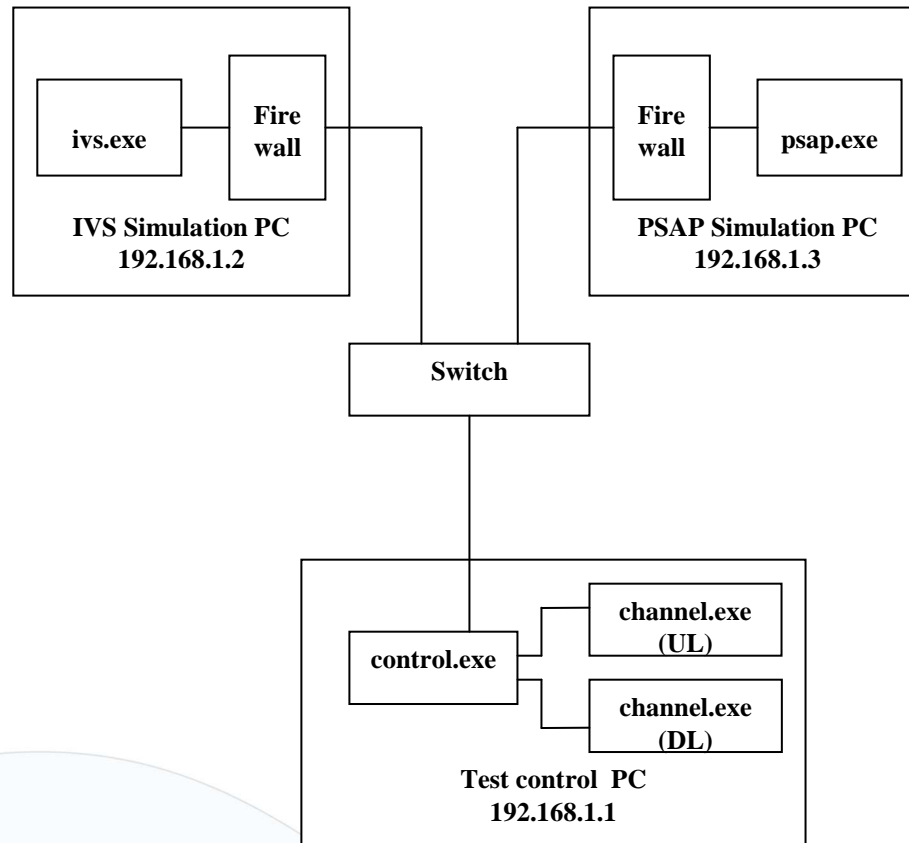
3GPP TSG SA WG4 Meeting #50
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*Málaga – Sevilla – Madrid
Herndon, VA - USA*



HOST LAB SETUP



- 3 PCs with Intel Core 2 Duo Processors
- Windows XP Professional Operating System
- *Outpost Pro* firewall from Agnitum
- *10/100 Fast Ethernet Switch (D-Link)*

- **Common conditions:**

- Same *Test Configuration File* for all candidates:
 - File with 2600 unordered tests covering 100 executions of each of 26 pre-defined conditions.
 - Random MSD, Random delays, random VAD, random index for error patterns.
- Same 'demosock' batch execution for all candidates:
 - Startframe:50
 - Totalframes:10000 (equivalent to 200 seconds)
- Same firewall settings:
 - IVS and PSAP cannot communicate directly.
 - Both communicate with Control PC only with IP addresses

SUMMARY OF RESULTS – CANDIDATE 1



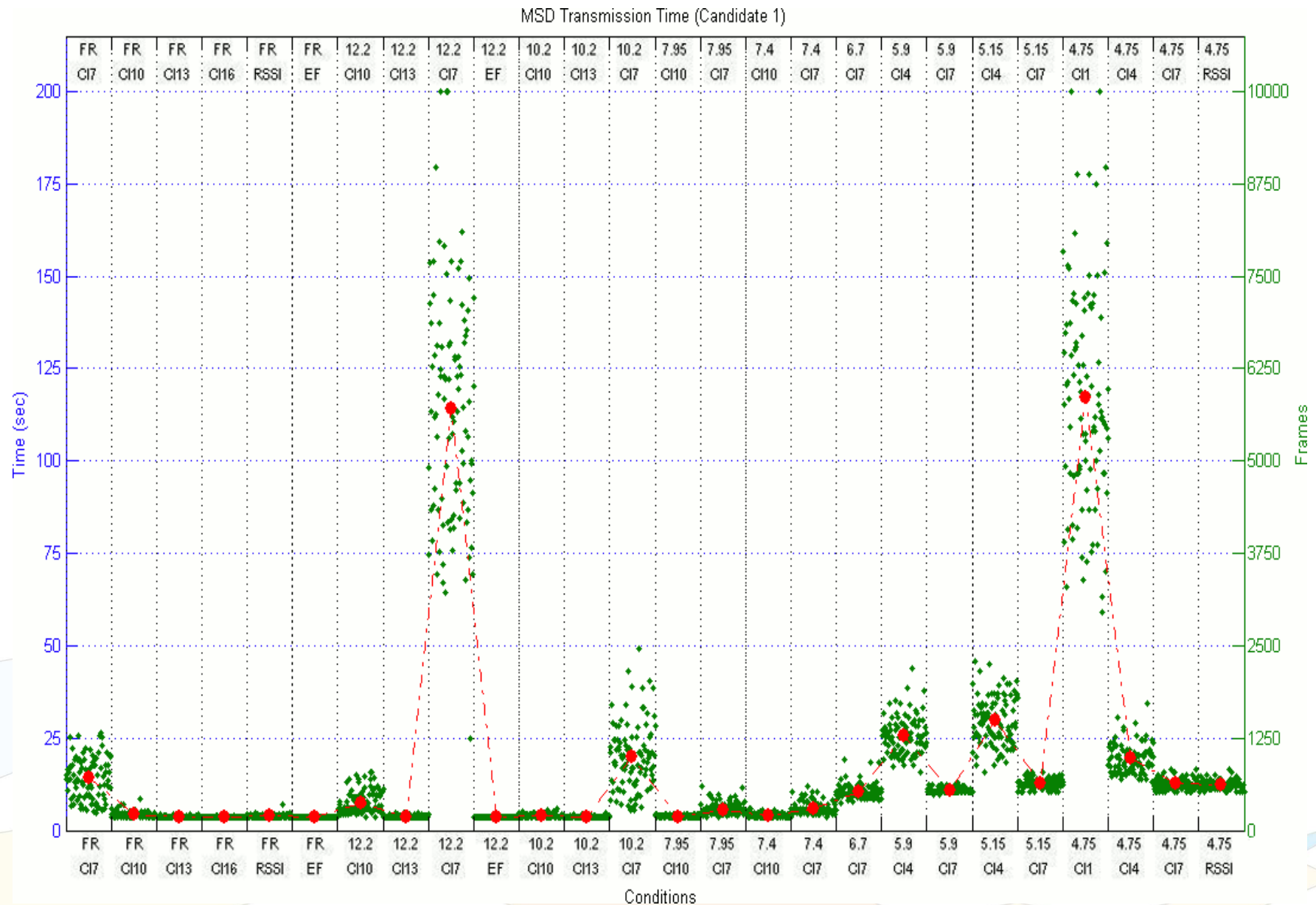
FINAL RESULTS	Unit	Candidate 1			Requirement
Figure of Merit	Frames	885,23			
	Seconds	17,70			
Number of timeouts	---	5			
Incorrect MSD's reported	---	0			Compliant!
Average time in Optimal conditions (Error free radio channel, FR and AMR 12.2 codecs)	Seconds	3,60			
Error free: FR codec tmin/tmax/average	Seconds	3,58	3,62	3,60	Compliant!
Error free: AMR 12.2 codec tmin/tmax/average	Seconds	3,58	3,62	3,61	Compliant!
Number of false trigger detections	---	0			Compliant!

SUMMARY OF RESULTS – CANDIDATE 1



Candidate 1	Average MSD transmission time (in seconds) per Condition								
	GSM_FR	AMR 12.2	AMR 10.2	AMR 7.95	AMR 7.4	AMR 6.7	AMR 5.9	AMR 5.15	AMR 4.75
C/I = 1dB	-	-	-	-	-	-	-	-	117,06
C/I = 4dB	-	-	-	-	-	-	25,82	29,71	19,61
C/I = 7dB	14,06	113,97	20,06	5,66	5,99	10,52	10,90	12,66	12,61
C/I = 10dB	4,28	7,48	4,02	3,78	4,02	-	-	-	-
C/I = 13dB	3,66	3,75	3,66	-	-	-	-	-	-
C/I = 16dB	3,61	-	-	-	-	-	-	-	-
Error Free	3,60	3,61	-	-	-	-	-	-	-
RSSI = -100dBm	3,81	-	-	-	-	-	-	-	12,34

SUMMARY OF RESULTS – CANDIDATE 1



SUMMARY OF RESULTS – CANDIDATE 2



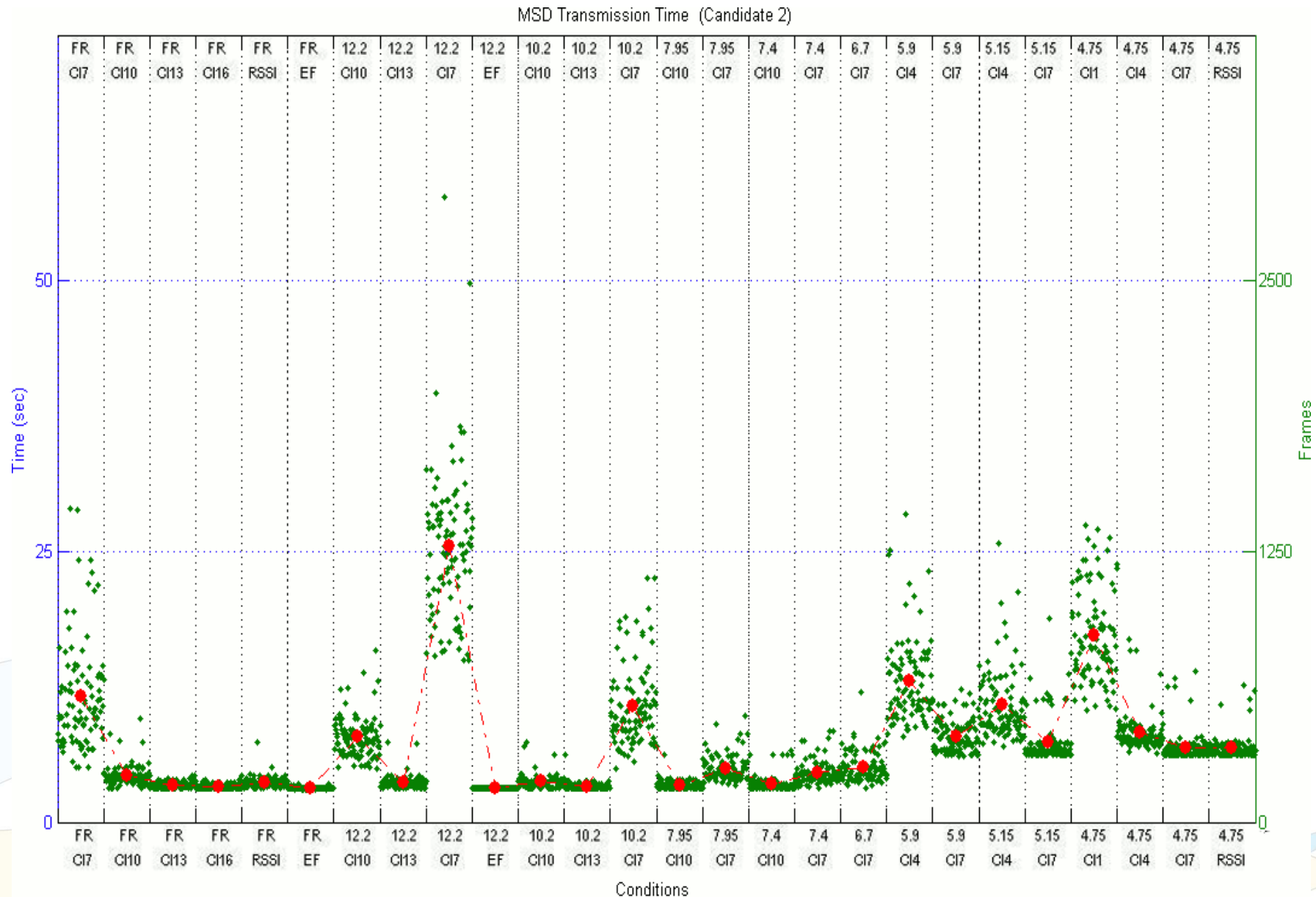
FINAL RESULTS	Unit	Candidate 2			Requirement
Figure of Merit	Frames	360,39			
	Seconds	7,21			
Number of timeouts	---	0			
Incorrect MSD's reported	---	0			Compliant!
Average time in Optimal conditions (Error free radio channel, FR and AMR 12.2 codecs)	Seconds	3,12			
Error free: FR codec tmin/tmax/average	Seconds	3,08	3,48	3,13	Compliant!
Error free: AMR 12.2 codec tmin/tmax/average	Seconds	3,10	3,12	3,11	Compliant!
Number of false trigger detections	---	0			Compliant!

SUMMARY OF RESULTS – CANDIDATE 2



Candidate 2	Average MSD transmission time (in seconds) per Condition								
	GSM_FR	AMR 12.2	AMR 10.2	AMR 7.95	AMR 7.4	AMR 6.7	AMR 5.9	AMR 5.15	AMR 4.75
C/I = 1dB	-	-	-	-	-	-	-	-	17,28
C/I = 4dB	-	-	-	-	-	-	13,09	10,78	8,22
C/I = 7dB	11,61	25,43	10,77	4,97	4,57	5,09	7,95	7,37	6,88
C/I = 10dB	4,34	7,84	3,75	3,43	3,53	-	-	-	-
C/I = 13dB	3,45	3,66	3,28	-	-	-	-	-	-
C/I = 16dB	3,24	-	-	-	-	-	-	-	-
Error Free	3,13	3,11	-	-	-	-	-	-	-
RSSI = -100dBm	3,70	-	-	-	-	-	-	-	6,87

SUMMARY OF RESULTS – CANDIDATE 2



SUMMARY OF RESULTS – CANDIDATE 3

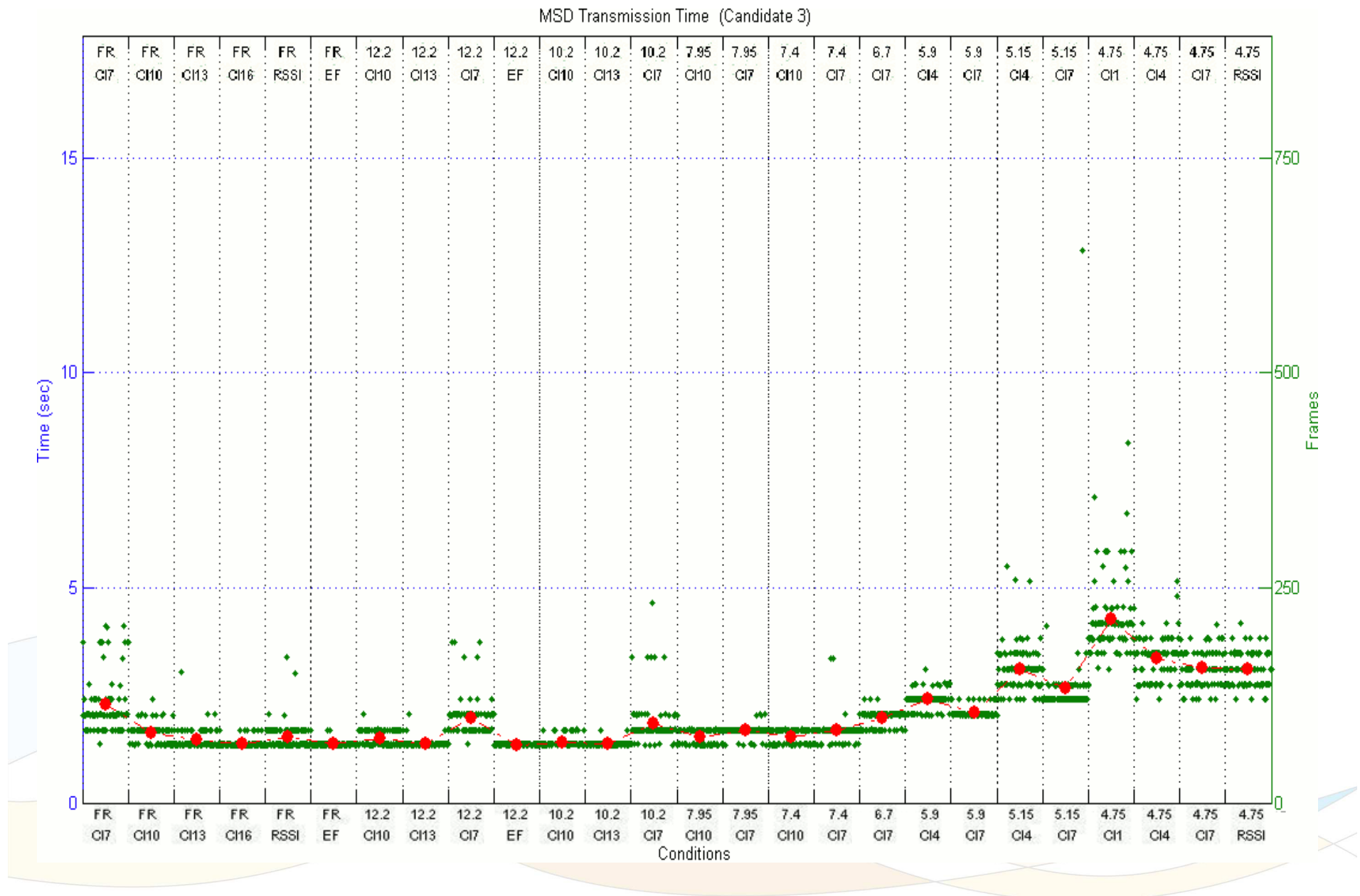


FINAL RESULTS	Unit	Candidate 3			Requirement
Figure of Merit	Frames	101,85			
	Seconds	2,04			
Number of timeouts	---	0			
Incorrect MSD's reported	---	0			Compliant!
Average time in Optimal conditions (Error free radio channel, FR and AMR 12.2 codecs)	Seconds	1,36			
Error free: FR codec tmin/tmax/average	Seconds	1,34	1,7	1,36	Compliant!
Error free: AMR 12.2 codec tmin/tmax/average	Seconds	1,34	1,38	1,35	Compliant!
Number of false trigger detections	---	0			Compliant!

SUMMARY OF RESULTS – CANDIDATE 3

Candidate 3	Average MSD transmission time (in seconds) per Condition								
	GSM_FR	AMR 12.2	AMR 10.2	AMR 7.95	AMR 7.4	AMR 6.7	AMR 5.9	AMR 5.15	AMR 4.75
C/I = 1dB	-	-	-	-	-	-	-	-	4,29
C/I = 4dB	-	-	-	-	-	-	2,41	3,12	3,36
C/I = 7dB	2,27	1,97	1,83	1,68	1,68	1,97	2,09	2,65	3,12
C/I = 10dB	1,61	1,51	1,40	1,53	1,53	-	-	-	-
C/I = 13dB	1,46	1,37	1,36	-	-	-	-	-	-
C/I = 16dB	1,37	-	-	-	-	-	-	-	-
Error Free	1,36	1,35	-	-	-	-	-	-	-
RSSI = - 100dBm	1,52	-	-	-	-	-	-	-	3,11

SUMMARY OF RESULTS – CANDIDATE 3

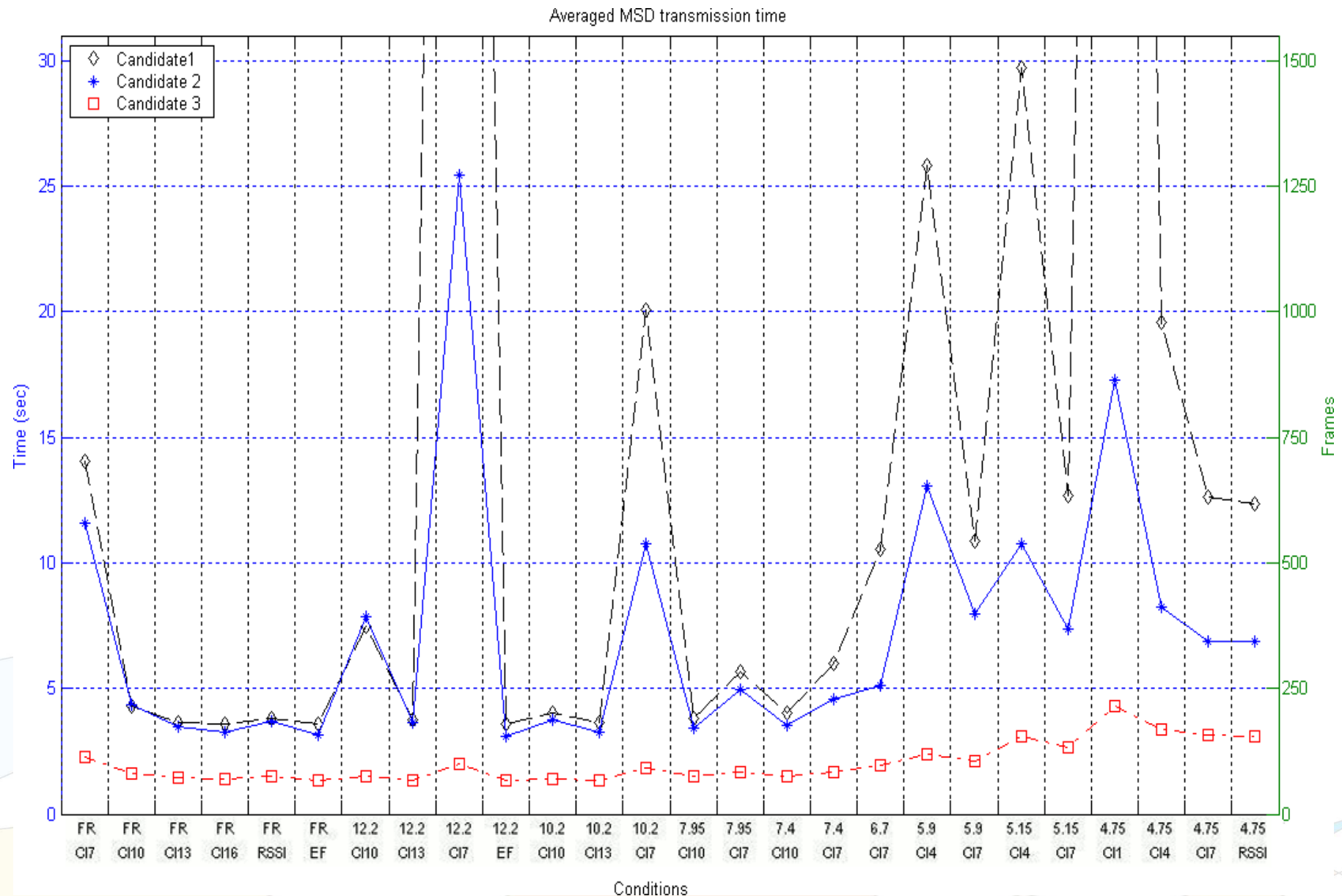


SUMMARY OF RESULTS



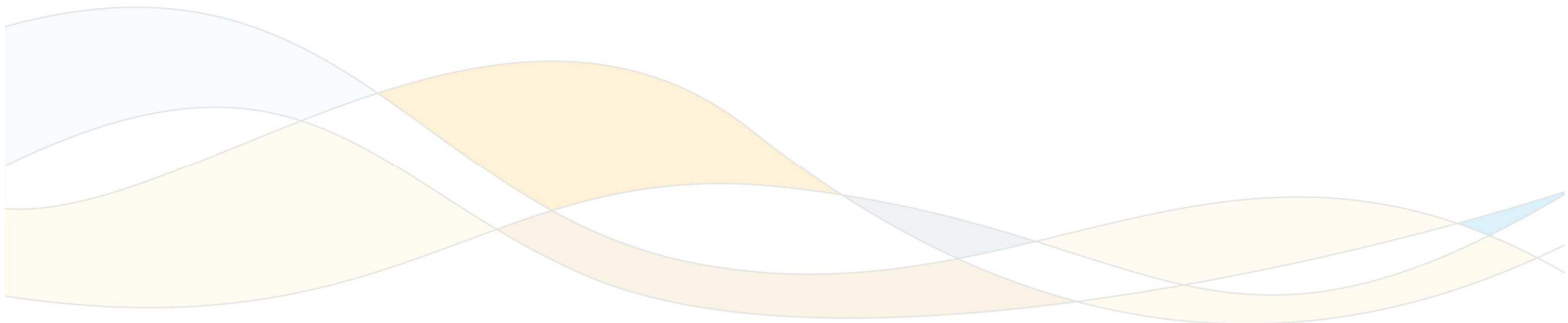
Summary of results for 3 candidates				
	Unit	Candidate 1	Candidate 2	Candidate 3
Figure of Merit	Frames	885,23	360,39	101,85
	Seconds	17,70	7,21	2,04
Number of timeouts	---	5	0	0
Incorrect MSD's reported	---	0	0	0
Average time in Optimal conditions (Error free radio channel, FR and AMR 12.2)	Seconds	3,60	3,12	1,36
Number of false trigger detections	---	0	0	0

SUMMARY OF RESULTS



- Tests evaluated so far:
 1. Official test campaign results (unordered test configuration file)
 2. False trigger detection test.
- Additional tests executed by the Host Lab:
 3. Execution of alternative test campaign (second test configuration file), as a double check of the main figures.
 4. Execution of ordered official test campaign, and comparison of results with the official tests

- Results with alternative test campaign:
 - All candidates show similar values to the ones obtained with the official test configuration file:
 - FoM difference: $<0.4\%$
 - No Incorrect MSD's reported by anyone



- Results with Ordered test campaign:
 - It is used to evaluate how many (if any) differences are compared with the Official Test File:

Summary of Differences			
	Candidate 1	Candidate 2	Candidate 3
Number	0	34	1

In candidate 2, no relation was found in the difference regarding the codec type or error pattern.

Tdoc S4-080490

**Thank you for your
attention**

How can we help more?



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