

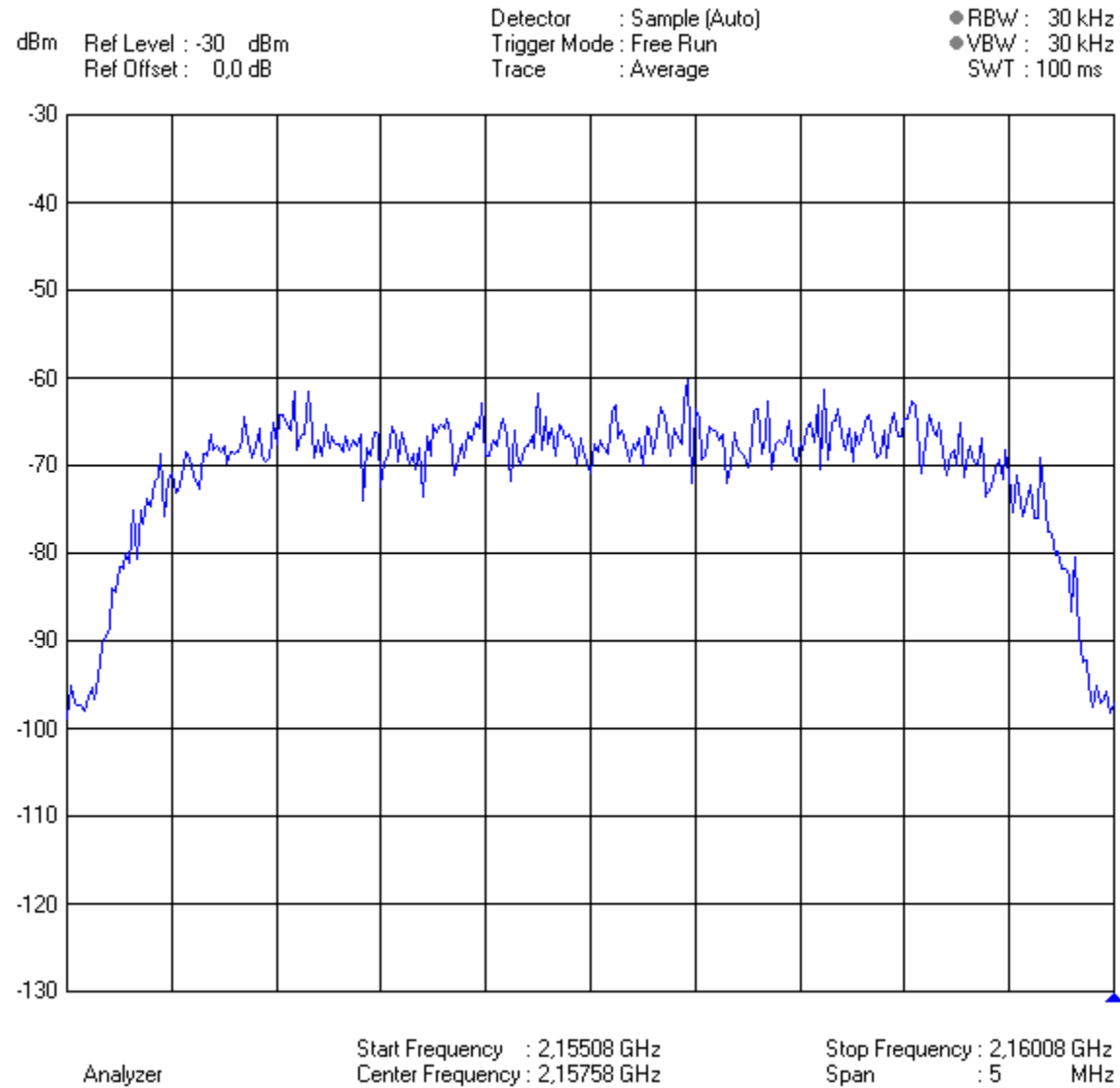
Medidas sobre el sistema UMTS

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1. Analizador de espectros (dominio de la frecuencia)
2. Herramienta de monitorización de la interfaz radio (Romes)

1. Analizador de espectros (dominio de la frecuencia)

Espectro de señal UMTS



2. Herramienta de monitorización de la interfaz radio (Romes)

Vista general de la herramienta

The screenshot displays the Romes (Replay ONLY) software interface. The main window is titled "Romes (Replay ONLY) - Untitled - Replay Of C:\RuS\RomesV3.53\MeasData\Samples\GSM\GSM_Normal_D1-D2-E-02.CMD". The interface is divided into several panes:

- UMTS/GSM Layer 3 View:** This pane shows a list of messages between two Sagem mobile phones (Sagem 0T-75/1[1] and Sagem 0T-35[2]). The messages are categorized as "Down" (received by the phone) and "Up" (sent by the phone). Key messages include "PAGING REQUEST TYPE 1", "SYSTEM INFORMATION TYPE 3", "SYSTEM INFORMATION TYPE 4", "SYSTEM INFORMATION TYPE 1", "SYSTEM INFORMATION TYPE 2", "PAGING REQUEST TYPE 1", "IMMEDIATE ASSIGNMENT", "CM SERVICE REQUEST", "CLASSMARK CHANGE", "CIPHERING MODE COMPLETE", "MEASUREMENT REPORT", and "CALL PROCEEDING".
- 2D Chart View:** This pane shows a graph of RxLev (Received Signal Level) in dBm over time. The x-axis represents time in milliseconds, ranging from 60,000 ms to 110,000 ms. The y-axis represents RxLev in dBm, ranging from 0 to 60. Two data series are plotted: "RxLev Full-Sagem 0T-75/1[1]" (red line) and "RxLev Sub-Sagem 0T-75/1[1]" (orange line). The red line shows a significant drop in signal level around 75,000 ms, followed by a recovery and a sharp increase to approximately 60 dBm around 90,000 ms.
- ASSIGNMENT COMMAND (Down):** This pane shows the details of the assignment command received by the phone. It includes information such as "Channel Description" (Timeslot number: 3, Channel type: TCH/F + ACCHs, RF hopping channel, Training sequence code: 1, Mobile allocation index offset: 3, Hopping sequence number: 0), "Power Command" (Power control level: 5), "Cell Channel Description" (Complete CA info, Bitmap 0, RF channels belonging to the BCCH allocation: 31, 39, 43, 57), "Mode of the first channel" (speech full or half rate version 1), and "Mobile Allocation, after time" (RF channels belonging to the mobile allocation: 1, 2, 3, 4).

The status bar at the bottom of the window indicates "56% complete", "Sheet(1)", "103579 ms", "Free: 2666 MB", "Replay Pause", and "CAP NUM | SCRL".



Eventos que generan informes de medidas

Measurement	Reporting events
Intra-frequency	1a-primary CPICH enters the reporting range 1b-primary CPICH leaves the reporting range 1c-non-active primary CPICH becomes better than active primary CPICH 1d-change of best cell 1e-primary CPICH becomes better than an absolute threshold 1f-primary CPICH becomes worse than an absolute threshold 1j-non-active E-DCH, but active DCH primary CPICH becomes better than an active E-DCH primary CPICH
Inter-frequency	2a-change of best frequency 2b-estimated quality of the current frequency is below a threshold and estimated quality of a non-used frequency is above a threshold 2c-estimated quality of a non-used frequency is above a threshold 2d-estimated quality of the current frequency is below a threshold 2e-estimated quality of a non-used frequency is below a threshold 2f-estimated quality of the current frequency is above a threshold
Inter-RAT	3a-estimated quality of the current frequency is below a threshold and estimated quality of other system is above a threshold 3b-estimated quality of other system is below a threshold 3c-estimated quality of other system is above a threshold 3d-change of best cell in other system
Traffic volume	4a-transport channel traffic volume becomes larger than a threshold 4b-transport channel traffic volume becomes smaller than a threshold
Quality	5a-a defined number of bad CRC are received
UE internal	6a-UE transmit power becomes larger than a threshold 6b-UE transmit power becomes less than a threshold 6c-UE transmit power reaches its minimum value 6d-UE transmit power reaches its maximum value 6e-UE RSSI reaches the UE's receiver dynamic range 6f-UE Rx-Tx time difference becomes larger than a threshold 6g-UE Rx-Tx time difference becomes less than a threshold
UE positioning	7a-UE position changes more than a threshold 7b-SFN to SFN measurement changes more than a threshold 7c-GPS time and SFN time have drifted apart more than a threshold

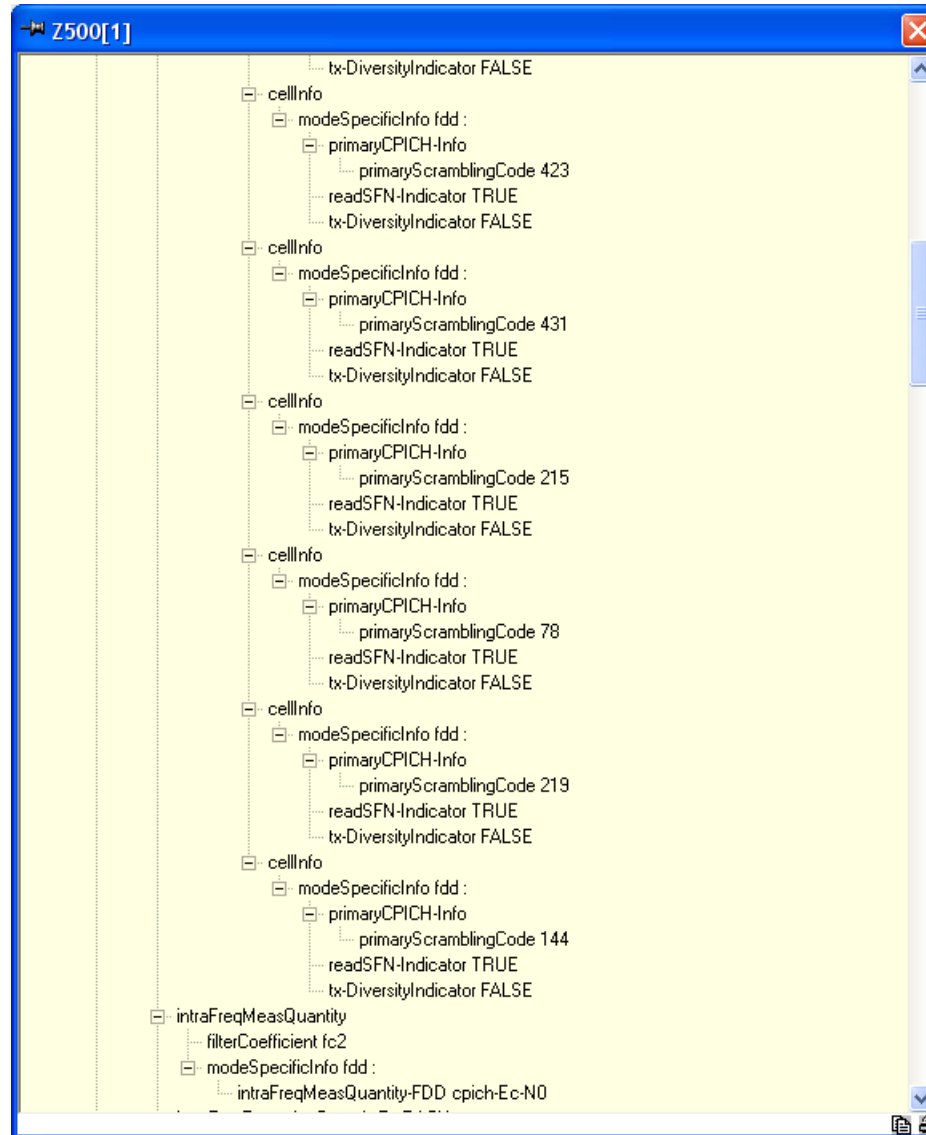
Mensajes de información de sistema

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Z500[1]
├── sib12Indicator TRUE
├── fach-MeasurementOccasionInfo
│   ├── inter-freq-FDD-meas-ind FALSE
│   ├── inter-freq-TDD-meas-ind FALSE
│   └── inter-RAT-meas-ind
│       └── gsm
├── measurementControlSysInfo
│   └── use-of-HCS hcs-not-used :
│       └── cellSelectQualityMeasure cpich-Ec-NO :
│           └── intraFreqMeasurementSysInfo
│               └── intraFreqCellInfoSI-List
│                   ├── removedIntraFreqCellList removeNoIntraFreqCells : NULL
│                   └── newIntraFreqCellList
│                       └── {}
│                           └── cellInfo
│                               ├── modeSpecificInfo fdd :
│                                   ├── primaryCPICH-Info
│                                   │   ├── primaryScramblingCode 227
│                                   │   ├── readSFN-Indicator TRUE
│                                   │   └── tx-DiversityIndicator FALSE
│                                   └── cellInfo
│                                       ├── modeSpecificInfo fdd :
│                                           ├── primaryCPICH-Info
│                                           │   ├── primaryScramblingCode 270
│                                           │   ├── readSFN-Indicator TRUE
│                                           │   └── tx-DiversityIndicator FALSE
│                                       └── cellInfo
│                                           ├── modeSpecificInfo fdd :
│                                               ├── primaryCPICH-Info
│                                               │   ├── primaryScramblingCode 278
│                                               │   ├── readSFN-Indicator TRUE
│                                               │   └── tx-DiversityIndicator FALSE
│                                           └── cellInfo
│                                               ├── modeSpecificInfo fdd :
│                                                   ├── primaryCPICH-Info
│                                                   │   ├── primaryScramblingCode 415
│                                                   │   ├── readSFN-Indicator TRUE
│                                                   │   └── tx-DiversityIndicator FALSE
│                                               └── cellInfo
│                                                   ├── modeSpecificInfo fdd :
│                                                       ├── primaryCPICH-Info

```


Mensajes de información de sistema



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