

# Comparison: MENOS Systems Vs Contribution Systems Classic

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## Abstract

This document Data transfer via satellite Systems is one of the most important activities day-to-day. MENOS and traditional satellite contribution systems (VSAT and DTV) importance this paper will provide a comparison between these systems in many parameters.

**Keywords:** MENOS, DTV, VSAT.

## 1. Introduction

The introduction MENOS multimedia is exchange over satellite and allowing Exchange video and audio material among several sites a large geographical area and been designed to Facility Work Broadcasters, and improve people collaboration across the network material exchanged transmits through a central station, Which provides permanent satellite IP connectivity among all remote stations. The menos content transmitted in real-time or be transferred as data files also be retained in the central hub station for archiving and later access by other stations, menos uses the satellite. Advanced DVB-S2 modulation technology and ensures the optimum efficiency of the bandwidth usage and thus reduces operational costs.

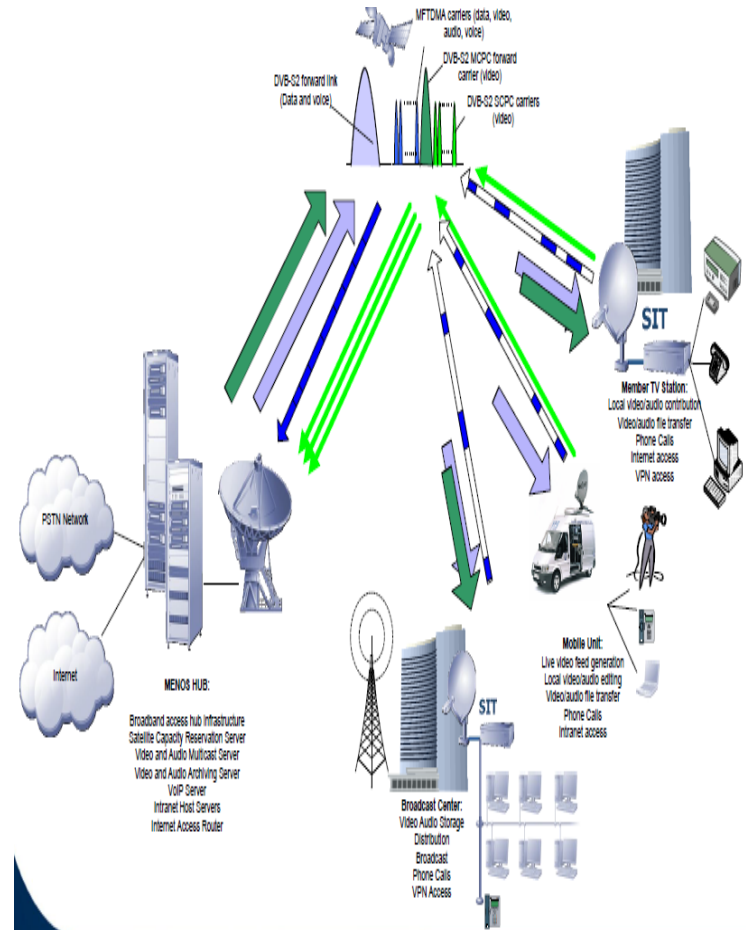


Figure 1: Conceptual Diagram

## 2. MENOS Coverage –Ku-C-Band

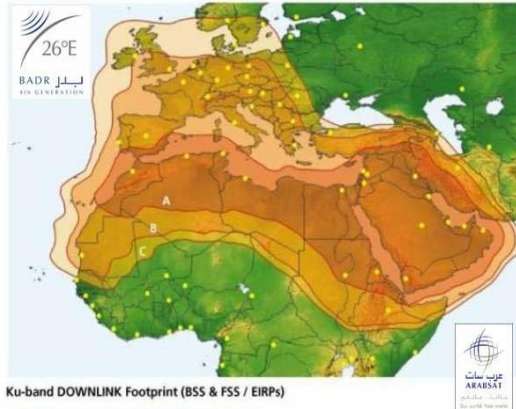


Figure 2: MENOS Coverage –KU BAND

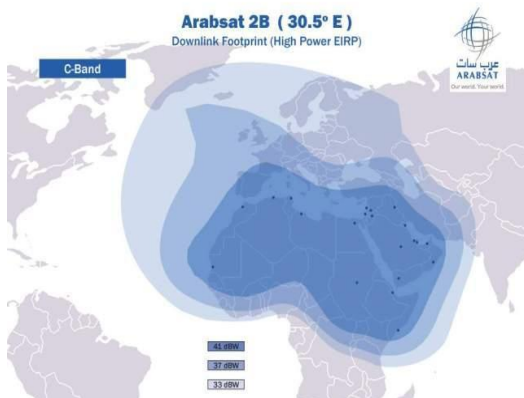


Figure 3: MENOS Coverage –C BAND

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This document is set in 10-point Times New Roman. If absolutely necessary, we suggest the use of condensed line spacing rather than smaller point sizes. Some technical formatting software print mathematical formulas in italic type, with subscripts and superscripts in a slightly smaller font size, this is acceptable.

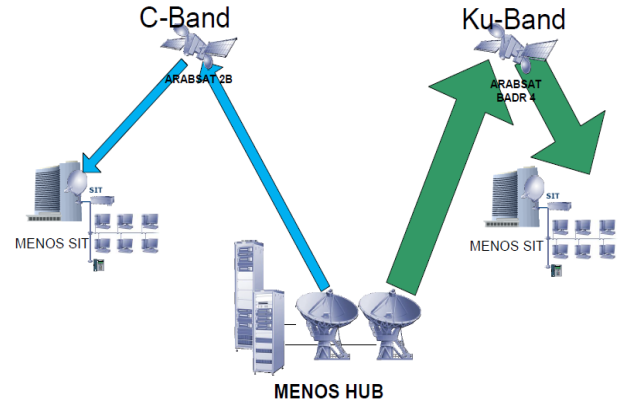


Figure 4: Proposed current MENOS Frequency Band Set-Up

## 2. Comparison between menos Systems and Contribution Systems Classic

The first paragraph menos is describing Satellite System applied for automatic link between ground station and Satellite It derived this name by virtue of the similarity to DIGITAL TV and Very Small Aperture Terminal In traditional satellite contribution systems, television and radio material is exchanged as real-time transmissions from one ground station to another. This requires the reservation of a satellite segment for fixed time duration, a manual line-up procedure, and expensive uplink equipment. At the receive site, the transferred material needs to be used on the fly or recorded. The coordination between the two stations, or between the stations and the Network Operating Center, must typically be done via terrestrial or mobile telephony.

In Contribution Systems Classic the path of the signal from the transmitter to the satellite directly to the future Mmaydmn:

- ❖ Less signal delay
- ❖ The fastest time

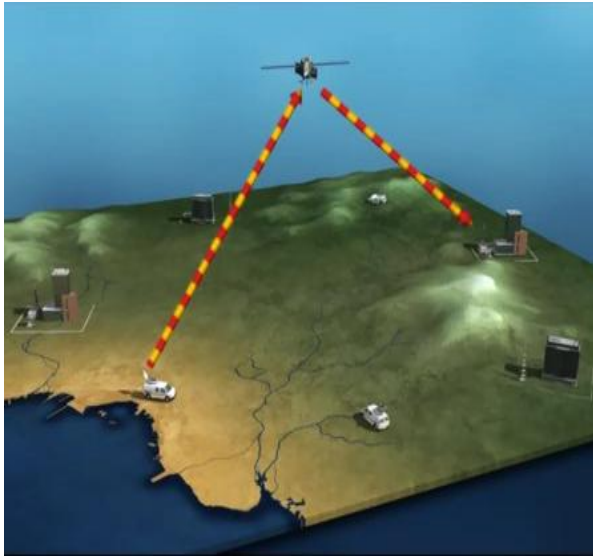


Figure 4: Transmitter Contribution System

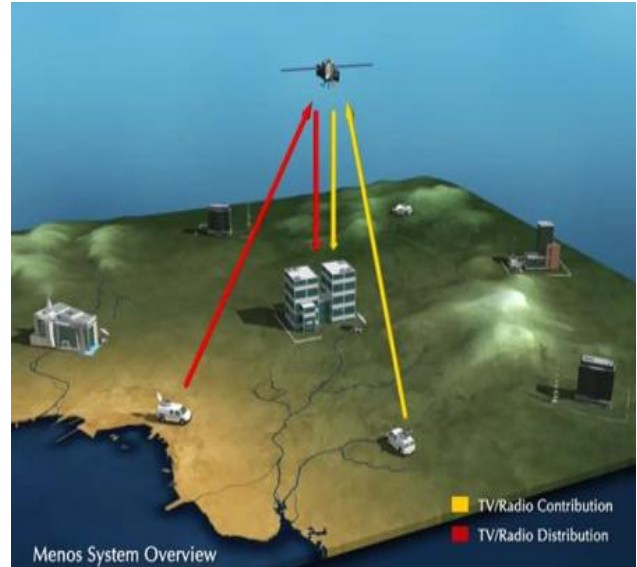


Figure 6: Transmitter MENOS System

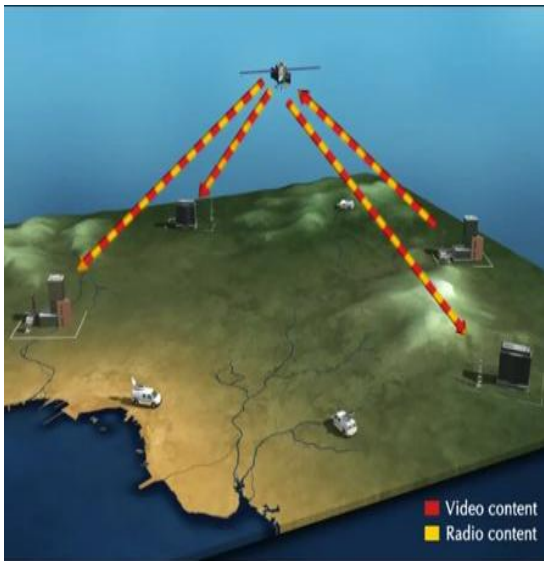


Figure 5: Receiver Contribution System

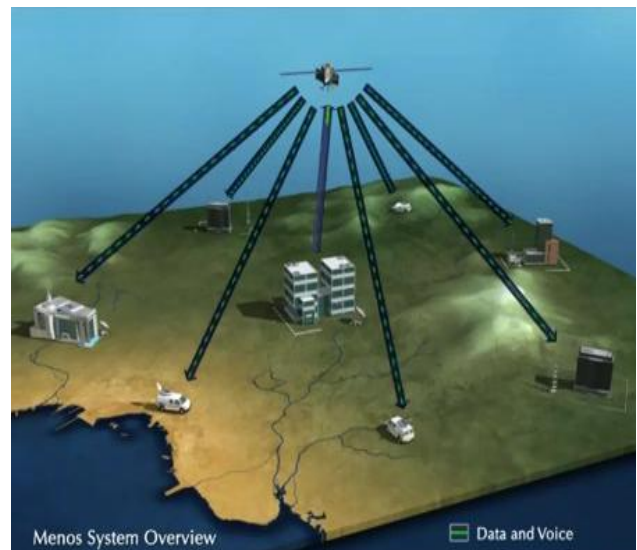


Figure 7: receiver MENOS System

**Table 1: Comparison between MENOS Systems and Contribution Systems Classic**

comparison	MENOS Systems	Contribution Systems Classic	
		DTV	VSAT
The cost of the station	Cheap	very high	very
Installation stations	Ranging from 3 hours (SIT-IP) and 9 hours (SIT-TV)	3 weeks	3 days
The introduction of the service	Automatically from the main station	Days at the site with the satellite operator	One day
TV exchange	10 channels by recording technology and the subsequent broadcast can be increased 7 channels can be increased as needed for direct broadcasting	6 programs	Cannot be applied
Voice Exchange	Multiple audio channels and according to the need of high-quality	Available but not practical	3 channels with high quality
Data transmission channels (Alantranat)	Many channels as needed and great speeds	Not available	A limited number (Channel 11) and low speeds
Coordination voice channels	Unlimited number (hundreds)	Not available and require the use of GSM or other means	Less than 10 available channels

Estimated VNs networking service	Available and secure	Cannot be applied	Cannot be applied
Video conferencing service	Good quality and available technology	Cannot be applied	Cannot be applied
Video conferencing service	Good quality and available technology	Cannot be applied	Cannot be applied
Audio Conferencing Service	Available high-tech and quality (5 systems)	Not available	Available (Mnzawmtan)
Remote training service	Available transmission and reception image and voice system across all stations on the national and regional levels	Not available	Available transmissions of voice-only stations Tunis, Damascus and reception of all stations
Internet service	Available at high speeds and at a cost of a simple national use (VPN)	Cannot be applied	Available but not practical because of the low speed
Radio archiving service	Available at low cost and sufficient capacities	Cannot be applied	May be available at great cost
TV archiving service	Available at low cost and sufficient capacities	Not available	Difficult provided
Maintenance	Basic direction of the main station	Engineers local trainers	Engineers local trainers
Spare parts	Low cost	Full reserve system (high cost)	Medium cost

The cost of training	Very low in terminals	High and require a number of engineers and operators	Medium in terminals
Encryption and configuration systems	Open (DVB-S2 MPEG2-4-WM9)	Open (DVB- MPEG-2)	Monopoly
Future expansion	Constantly available at a reasonable cost	High cost	Limited in the services

### 3. Discussion

After reviewing all of the previous regimes and we found the best Almenos system. For the following reasons:

1. Do not need to be specialists in the operating
2. mechanical system.
3. Main Control Center.
4. Low maintenance costs.
5. Pieces a low-cost parts
6. Future expansion constantly available at a reasonable cost available in the systems (VSAT) and (DTV) including:

- Training for service after the national and regional scales transmission and reception and an interactive system of all plants and thus meet the urgent need for a strategy and various radio networks and Allvzionehmistoy higher flexibility and interactive, where it can be applied in stages according to the needs of users.

- Zam locked and protected with the possibility manufactured by a number of companies as it scaled and open (non-monopolist)

- Platform to add other services in the future (IP-Platform) and financial costs are reasonable.

### 4. Conclusions

This paper presented Comparative : MENOS Systems Vs Contribution Systems Classic. The comparison about( The cost of the station - Installation stations - The introduction of the service - TV exchange -Voice Exchange - Data transmission channels (Alantranat)- Coordination voice channels - Estimated VNs networking service - Video conferencing service - Audio Conferencing Service - Remote training service - Internet service Radio archiving service - TV archiving service – Maintenance - Spare parts - The cost of training -Encryption and configuration systems - Future expansion ) the menos Advantages use of the latest technology currently available in the world

### Acknowledgments

Abdallah Tagalser Mohammed was born in AL KAMLIN /Sudan , on May 1, 1987. He received Bsc degree in Electronics Engineering (Communications) from Al Manhal Academy of Science, in 2012. And now attends now Msc degree in Engineering communications from University / Al-Zaiem ALazhare University,

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