

Transition to HD-TV

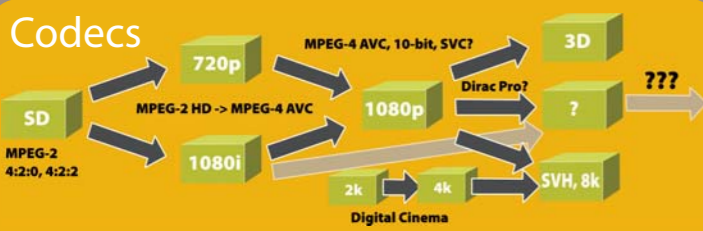
The broadcast industry is transitioning to High Definition TV. Unfortunately, the previous statement is about the only thing that can be agreed upon. Like everything in this world, when we look "under the hood", it gets a lot more complicated and this is where the consensus disappears:

- What codec formats? 720p, 1080i, Full HD 1080p 50/60. What about 2k, 4k, SHV, 3D?
- What cables/connectors after SDI: HD-SDI, 3G-SDI, Dual-link, Fiber, wireless?
- Moving from MPEG-2: Is it MPEG-4 AVC, 4:2:2 or 4:2:0? What about JPEG-2000 & SVC?
- In studios & production it is different, but what about Events/Sports contribution? FNG?
- Where is MENOS headed? Will it help me in the future to do what I need to?
- Where does satellite fit into the HD puzzle?
- It might be easy in Europe or America but what about my region?

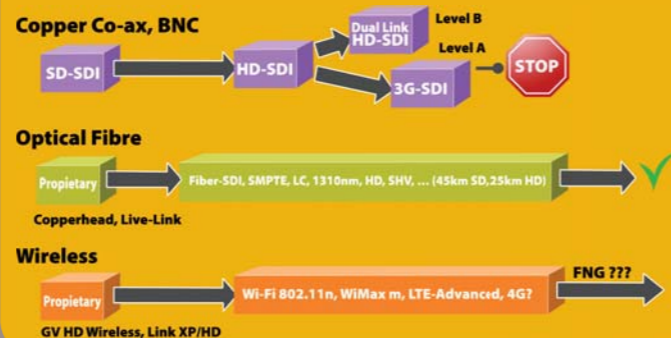
Each year, the number of bewildering choices seems to increase, yet the budgets and revenues get even more constrained. What are the required and wise investments to keep pace? What to do?

If you need and want to find out more, make sure you attend:
ASBU Technical Symposium on HDTV, Tunis 29th & 30th October 2009

The above issues will be addressed & discussed. Hear the latest vision and direction of MENOS and more. We also want to hear what you think, so we will be listening as well as talking.



Cables/Connectors



News in Brief

- MENOS R1.4 installed. Release 1.4 is installed and has been rolled-out in the ASBU MENOS network.
- In Feb 2009, there was an average of 5 hours of TV sessions per day. In Sept 2009, this had risen to nearly 13 hours per day and is growing each month. For radio, the number has risen from 4h/day in Feb to over 19h/day in September: an increase of over 400%.
- ASBU & Arabsat sign purchase agreement to extend MENOS network capacity by migrating to Arabsat 5A, due to be launched early 2010.

Did you know?

- During the 19 days of coverage of the 2008 Beijing Olympic Games, a total of 115 sessions were booked & transmitted with MENOS, with 223 hours of TV content exchanged. All TV content was also archived into the central storage server.
- In MENOS, there are 2 ways of storing content for later playout or exchange:
 - **Local Storage**
Session content stored on the SIT (terminal) itself. Only accessible to the specific SIT.
 - **Central Archive**
Session content stored in the Hub in the central archiving storage server. Accessible to anyone in the network with suitable rights.
- Retrieving archived content from the central storage and transmitting over the MENOS satellite network is called an "OnDemand Session".

THE WEIGHT IS OVER



EDITORIAL INFO

The ASBU MENOS Newsletter is brought to you by ASBU and Newtec.
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MENOS NEWSLETTER

SERVING THE MENOS USER COMMUNITY

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Special Introduction to 1st Issue

Welcome to the 1st edition of the MENOS newsletter.

The newsletter is aimed at you, the users of the ASBU MENOS network. The goal is to provide a regular update of all the latest features and MENOS related news stories, to keep you up-to-date with all the latest service evolutions and products that you want to hear about, as a valued MENOS user.

We do not only want to inform but we also want to get you involved. We sincerely wish to get your feedback and comments and want to include "MENOS in action" interviews, promoting best practices that we all benefit from.

So when you have read this, let us know what you think. What would you like to see? What are we over-looking and how can we improve this award-winning system?

MENOS really is a jump into the next-generation: its All-IP architecture, combined with the latest in broadcast and satellite technologies has provided a leading-edge solution to the ASBU region. But the broadcast industry is faced with phenomenal challenges and change. Working together, we can provide the system you need today and tomorrow to face those challenges and changes.

The MENOS team

IBC2009 Awards Winner

Congratulations ASBU and Arabsat

Judges' Award Innovation Award - Content Delivery

The ASBU MENOS network, developed by Newtec and hosted by Arabsat, is a revolutionary concept for the broadcast industry. A next generation all-IP network for contribution and exchange of multimedia content over satellite.

The MENOS system also provides ASBU a complete range of tools to facilitate coordination tasks and provide additional IP services across the network.

Advanced DVB-S2 modulation technology, combined with the statistical multiplexing of the data, voice, television and radio signals, ensures the optimum efficiency of the satellite bandwidth usage.

"We are very proud of MENOS as one of our most innovative and challenging projects, and we are really appreciative to IBC and to the international community to recognise it. I would like to thank all those who have worked very hard from ASBU to make this regional and Arab project achieve this recognition in the international arena."
 Dr. Riyadh Najm, ASBU President

"The introduction of MENOS has been a historical moment for the broadcast industry, and we are delighted that the Arabsat satellites are playing a key role in this. We have worked closely with the ASBU to ensure that they have a real technological leadership with this advanced service and are proud of the recognition from the industry, validating our vision for the future."
 Khalid Balkheyour, CEO of Arabsat

"This success - coming at such a showpiece event for our industry - caps another remarkable year for Newtec and is really an acknowledgement, not just of our own people and their commitment but for the teamwork between ourselves, Arabsat and the ASBU."
 Serge Van Herck, CEO of Newtec.

MENOS
 Multimedia Exchange Network Over Satellite

Newtec
 SHAPING THE FUTURE OF SATELLITE COMMUNICATIONS
www.newtec.eu/menos

Key People Spotlight: Meet The Parents!

Each issue, we put some key MENOS people under the spotlight. Where better to start than with the founding fathers of the MENOS system. It was through their vision that the MENOS idea was conceived. To turn that vision into reality of course took the concerted effort of many people and organizations, but let us start at the beginning. The idea for MENOS was conceived at the 2004 Olympics in Athens, during a brain-storming session about the future of broadcasting and next-gen ASBU networks for TV/Radio contribution and exchange. The name MENOS was figured out by Dirk on the plane home! We are sure the names are very familiar to many of you:

- Abdelrahim Suleiman, the Technical Director of ASBU.
- Dirk Breynaert, the founder and current CTO of Newtec.

Dirk prefers to call himself the mother of MENOS: "4 year pregnancy, carrying the MENOS baby, painful but spectacular birth, our bouncing baby is growing fast, and is healthy and strong".



Abdelrahim Suleiman

Dirk Breynaert

Understanding the MENOS Roadmap



Keeping track on all the MENOS release numbers can be useful to understand what features were introduced when and to stay aligned with the future planning. An overview of the numbering, timing and main new functionality is given below. In each release there are many other additional minor features and improvements, only the major ones (that a user typically sees) are mentioned:

- 1.1. First installed version for Factory Acceptance Tests and initial system validation and demos.
- 1.2.0. Version used for 2008 Beijing Olympics.
- 1.2.2. New GUI look-n-feel. MENOS commercial operation launched.
- 1.3. Preparation for MENOS service expansion and growth: a lot of functionality added to the Hub/NOC including enhanced provisioning, Virtual Network (VN) functionality, greatly improved fault management and supervisory capabilities C-band Hub installation & commissioning.
- 1.4. Modified billing and tariff model.
- 1.5. Session flexibility: late joining and session extension.
- 1.6. OpenDSNG support. Continued ease of use & management functionality.
- 2.0. More efficient satellite modulation scheme, expanding IP bandwidth for larger radio SLAs, enhanced Store/forward workflows & additional value-added services.

And there is a lot more to come after that too. Stay tuned !

Introducing: Rami Al Khatib

Who should you talk to regarding MENOS SITs/ DSNGs? Most of you already know Laurent Roussel, from the Newtec Dubai office. With this newsletter we would like to introduce a new member of the Dubai office team: Rami Al Khatib is the new Sales Manager of Newtec in Dubai, responsible for some of the areas in the MENA region.



Rami Al Khatib

Rami has an engineering background with recent sales experience in Satcom and VSAT services and solutions to broadcasters, telcos and resellers in the MENA region. We welcome him to the MENOS community.

You can contact Rami on:

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Email: rami.alkhatib@newtec.eu

You can meet him at:

Gitex/Gulfcomms, Dubai, October 2009
ASBU Technical Committee, Tunis, October 2009
MEBS, Abu Dhabi, November 2009
CABSAT MENA, Dubai, March 2010

Feature: SRTC MENOS Expansion, Ku and C-Band

MENOS IS EXPANDING

The first "Virtual Network" expansion of the ASBU network has now been agreed with the Sudanese public broadcaster. This involves the deployment of both Ku-band SITs and also the first C-band terminals on the expanded MENOS network. As well as capacity in Ku-band on the Arabsat BADR-4 satellite, the MENOS hub in Algeria has recently been upgraded to add C-band RF equipment, running on Arabsat 2B. Whereas the footprint of the BADR-4 Ku beam covers the North of Sudan, the C-band Arabsat 2B covers the entire country as well as additional parts of Africa & the Middle-East. The deployment of the SITs to Sudan will be in place to cover the forthcoming Sudanese general elections in 2010.

The recently signed contract will provide terminals in 2 phases:

- Phase 1: 45 terminals (9 TV terminals, 13 Radio terminals, 20 IP terminals, 3 DSNG)
- Phase 2: mainly IP and Light FlyAway terminals

This is an important milestone in the growth of the ASBU MENOS network and is in many ways a 'first':

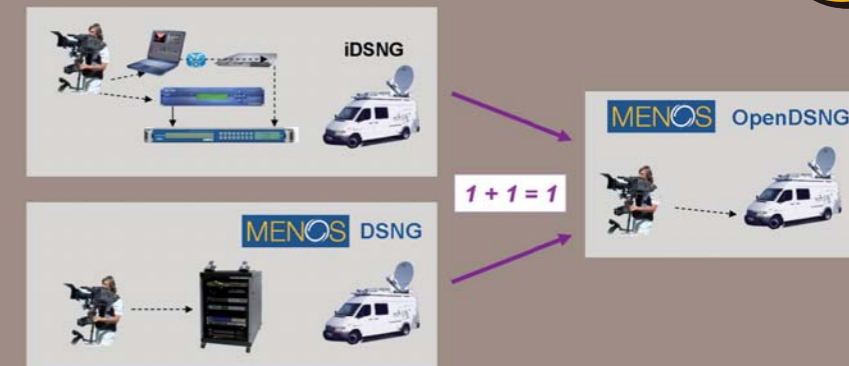
- 1st Virtual Network (VN) beyond the original ASBU VN
- 1st Operation DSNG TV trucks (Ku-Band)
- 1st Operation C-band terminals
- 1st SIT-IP terminals installed (IP and VoIP only, no Radio/TV encoders/decoders)

Broadcasters are subject to unprecedented challenges to their future business. When choosing the best solution for their future mobile news gathering needs, the bewildering array of alternative technologies and the need to make the right choices mean that broadcasters have to carefully balance financial investments with the technical capabilities that these solutions can bring. The new MENOS OpenDSNG solution provides key benefits in terms of multi-network flexible usage and considerable CAPEX and OPEX savings:

- 1 DSNG can work in both MENOS and legacy "manual" modes, whatever your outdoor unit or contribution/exchange needs are.
- CAPEX savings: The smart choice
 - Invest in 1 set of equipment, max re-use: MENOS, TS over ASI with DVB-S, IP over DVB-S2, ...
- OPEX saving:
 - Use MENOS for the lowest satellite usage, hence lower session cost
 - Other free or cheaper bandwidth can be used without restriction
- Maximum flexibility at all time

MENOS OpenDSNG will be available with Release 1.6

Feature: MENOS OpenDSNG



MENOS OpenDSNG: Product Portfolio (as of July 2009)

OpenDSNG Integrator	Flyaway	Small Driveaway	Medium SNG Light	Large Full SNG
ND SatCom <small>An SES ASTRA Company</small>	Flyaway	SkyRAY Light	SNG SkyRAY L	Full SNG
OmniGlobe <small>NETWORKS</small>	tba	Bucky	Cygnus	Hercules
SEMATRON	Flyaway + Suitcase	Compact SNG	Full DSNG Van	