digital edition

Lighting&Sound international

July 2009

entertainment, presentation, communication

www.lsionline.co.uk

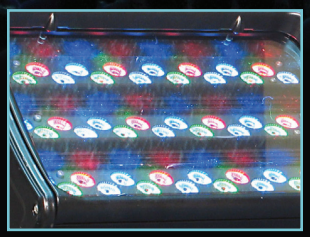
Eurovision 2009

Moscow witnesses a record-breaker

War of the Worlds
The classic show on tour

NSDF'09
Technician: Impossible

SSE Audio Group
A long-playing record



TF: Stage Lite LED
Luminaire check-up . . .

PLUS: PLASA'09 Previewed; Underdrome at the Roundhouse; Corporate Social Responsibility; HippoSchool; Brits on Broadway; Headphones Reviewed; Audio File; Crew Cuts; Rigging Call & more . . .

Words by Joan Lyman
Photography courtesy of Procon

The *Eurovision Song Contest*, now entering its 55th year, continues to evolve and even amaze. The 2009 contest in Moscow proved to be the biggest yet, breaking records in everything from number of viewers to roof load - precisely what the organisers wanted. Joan Lyman reports for L&SI . . .

This year's *Eurovision* was held in Moscow's Olimpiysky Arena, site of the 1980 Summer Olympics, with a live audience of 18,000 and an estimated 200 million television and internet viewers, second worldwide only to the Olympic Opening Ceremonies. The secret weapon: a collection of *Eurovision* technical alums, teamed with an exceptionally ambitious team of Russians, eager to show the world how it's done . . .

Procon Event Engineering of Hamburg, Germany was the main provider of technical crew and equipment for the gala of 42 songs, three opening acts, and three interval acts packed into three live broadcasts - two Semi-finals on 12 and 14 May, followed by the Finals on 16 May. In all, 42 trailer trucks with over 400 tonnes of technical equipment and a team of more than 70 people were required for this year's event to handle all lighting, video, rigging and sound.

The Moscow vision was sparked the moment Russia won *Eurovision* in Belgrade last year, with organisers immediately hungry to make 2009 a landmark production in every way. Each year, technical suppliers must submit a tender to be chosen and Procon won the Moscow bid in early 2009. Procon had been technical co-supplier for *Eurovision* in 2000, 2001 and 2002, Turnkey supplier in 2006 and 2008, and had also supplied three *Junior Eurovision Song Contest*s, so the knowledge was built into the foundation. Procon CEO Morten Carlsson hired Ola Melzig - who has managed six previous *Eurovision*s - as production manager to further the knowledge base. Melzig, alongside assistant production manager Tobias Åberg (also with six previous *Eurovision*s under his belt) and the rest of the Procon crew packed their cases for their 52-day stay in Moscow - a total of 3,171 hotel nights!

Load-in began on 31 March, and not a day too soon. The Procon crew, led by technical production manager Matthias Rau, worked around the clock for the next 50 days to ensure spectacular and safe results. Both Procon and Melzig know that unexpected challenges need to be expected! In addition, host broadcaster Channel One had some big ideas on the docket. The show included some of the most elaborate Opening and Interval acts in *Eurovision* history. These included Cirque du Soleil performing a three-minute opener to 2008 winner Dima Bilan and an interval act featuring Fuerza Bruta in the final, which involved six water-filled swimming pools lowered from the arena ceiling with performers swimming and splashing over the heads of the audience and the artists in Green Room.

The 2009 show also got some new-found attention from some western European countries. Most improved was probably the United Kingdom, with a song composed by Andrew Lloyd Webber and performed by Jade Ewen (coming in a respectable 5th) and France with a composition performed by the legendary Patricia Kaas.

Sometimes, bigger really is better . . .

With an overall span of over 100m from right to left, there was more happening on stage than one could take in at a glance. An enormous 1120sq.m Martin Professional LC LED screen hugged a centre stage where literally every piece could fly, separate, rotate, and display moving images. The stage design was completed in late 2008 by another *Eurovision* alum, John Casey, principal designer of New York-based i.e. Design Events. Likely one of the most complicated stages in *Eurovision* history, it contained approximately 2000sq.m of LED surface, moving back elements and a huge ring over the stage, which could separate into 12 pieces, capable of creating a myriad of stage looks.

Casey stated: "I tried to come up with a theatrical design for the contest that incorporates Russian avant garde art into a contemporary setting, almost entirely made up of different types of LED screens." He added, "It's an honour to act as Russia's designer."


EUROVISION
SONG CONTEST

Crew Credits

Production Manager: Ola Melzig

Assisting Production Manager: Tobias Åberg

Technical Production Manager: Matthias Rau

Production Assistants: Joan Lyman, Olga Morr

Lighting Designer: Al Gurdon

Assistant to LD: Kerrie-Ann Keogh

Lighting Programmers: Andy Voller, Ben Cracknell

Lighting Crew Chief: Frank Karpinski

Sound Designer: Klaus Rahe

Sound Crew Chief: David Bergmann

Video Crew Chief: Marco Scholwin, Hans Cromheecke

Head Rigger: Mirko Hentze

Head of Dimming: Sven 'Klimper' Jargstorf

Head of Workshop: Björn Mittelstedt

Chief Electrician: Ulf Richter

PA Sound Operators: Bernd Buthe, Kai Reiss

Logistics Manager: Manuel Vogt

Monitor Operators: Karim Hubatsch, Matthias Hentschel

Lighting System Engineer: Dennis Drewen, Johannes Wahl

Lighting Gaffer: Rich Gorrod

Best Boy: Dave Hallett

Lighting Technicians: Angelika Apell, Dana Cicin-Angul, Kai Gerhardt, Maris Kruse, Maximilian Mass, Mirko Tauchert, Nadja Bartels, Olaf Pötcher, Ralf Streckmann, Robert Ulm, Veit Schlopschnat

Bad Boy Technicians: Iestyn Thomas, Nick Edwards

Catalyst Operator: Ian Reith

Catalyst Technician: Nev Bull

Content Technicians: Lauren Cahill, Dave Newton

Pufferfish Operator: Timo Kauristo

Vision Supervisors: Chris Methven, Luke Chantrell

Followspot Supervisor: Peter Canning

Followspot Operators: Chris Henry, Simon Anderson, Janis Gipslis, Jack Gurdon, Elena Pozdnyanskaya, Galina Maksimova, Svetlana Agapova, Sergei Potapov, Alexander Balonuk, Andrei Mikhailov, Alexander Mikhailov, Ivan Sakharov, Sergei Supryaga, Anton Rodionov, Yegor Volodin, Alexander Frolov, Dmitrii Ostropik.

Sound Stage Technicians: Rolf Gerling, Dimitry Zhukov, Daniel Borrmann

Sound System Engineer: Thorsten Maier

Sound Technicians: Leif Niederhuefner, Sebastian Kuhn

Riggers: Axel Janssen, Fabian Rudolph, Guido Wydra, John von Look, Kai Brune, Manfred Janssen, Marcus Heinz, Martin Fruck, Martin Witte, Michael Bluhm, Michael Körtge, Michael Steuber, Peder Predel, Philip Boht, Ralf Tieman, Ralph Matthiae, Thomas Glindmeier

Black Out Drapes: Sven Heidlas, Lars Köhn

Media Server Managers: Jan Schröder, Mike Redmer

Video Technicians: Andreas Stein, Benedikt Piaskowy, Christophe Cuyt, Daniel Zaffke, Detlef Liem, Herve' Bievelez, Jeroen Mathieu, Marcus Neumeier, Markus Doganay, Philip Hagen, Robert Förster, Svenja Bischoff, Thomas Reifferscheid, Thomas Zaorsky, Tino Müller, Xavier-John Elleboudt, Youri Mestag, Yves Van Acker, Yves Winand.

The stage was constructed by Sweden-based Visual Act, led by Jim Fainberg, who has mastered the *Eurovision* stage in Sweden (2000), Estonia (2002), Latvia (2003) and Kiev (2005). The stage itself was stunning, with the most noticeable moving object being the stage header ('big ring'), although more than 70 movable axes were in use for the duration of the shows. Walls, ceiling, ribs, header and rearstage floor moved during the 32-second "postcard" in between each act to set the stage for the next country. Behind the stage was the Visual Act winch "farm" - with 30 winches in a row connected to various flying objects using over eight kilometers of wire. The winch motors were controlled by Rexroth Indra Drives connected together via PROFIBUS, moving 1000kg at 2m per second - all driven by the Visual Act control desk. 250 of Element Labs' 1m Versa-Tube HD fixtures were built into the rear stage sticks, with 106 Thomas Pixeline fixtures lining the sides of the stage floor.

Andy Calhoun, system operator for Visual Act, explained their unique way of identifying the sections of the header: "Because the header was in 12 sections, we referenced each section with time, as in a clock face. I always got strange looks from people who said 'move that one' and pointed, then I would have to check my watch to see which 'hour' to move. They didn't realise that I was looking at my watch for clues - they would say, 'please do it now!'"

Rigging

The support for the flying stage elements, plus all of the lighting took special rigging plans. Approximately 4400m of truss were required to suspend the enormous amount of equipment for the show. A combination of truss types including Prolyte and Eurotruss was hung from 900 rigging points, suspended by 520 ChainMaster hoists. Head rigger Mirko Hentze oversaw the daily rigging, spending more time in the roof than his own hotel room.

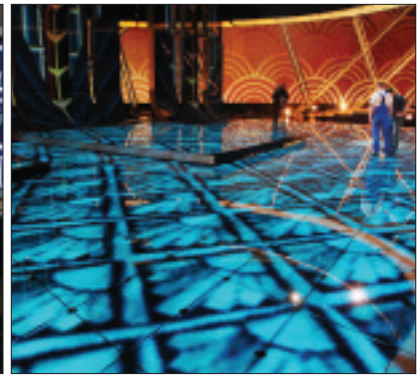
Although the total ceiling load of the arena was predetermined by the venue engineers, it was still monitored daily, since the team was adding load to the roof almost right up to the broadcast. At the time of broadcast, the roof load stood at an astounding 140 tonnes. There was actually too much load from the beginning, so a large scaffold was designed to support an additional 40 tonnes of roof weight, in addition to holding the Martin LC screen. Not only did the crew have to allocate weight to the scaffold, at one point the engineers discovered that the roof wasn't responding to the loads as expected, so the grid had to be lowered and all of the trusses landed to lower the load; then 48 of the rigging points supporting the mothergrid had to be moved from the house grid to the roof beams five metres above it.

Additional point hoist winches and an Illusionist control system were provided by Stage Technologies for the show's various performer flying sequences.

Lighting

Award-winning lighting designer Al Gurdon, known for large-scale events such as the MTV Europe Music Awards, the Nobel Peace Prize concerts, and Robbie Williams' World Tour, created more than a mouthful of looks for the

The control room.



Eurovision Equipment List:

LED / Video
Total of LED Tiles (approx.): 2000sq.m

LED
231sq.m XL Video FLED
Barco O-Lite (735 tiles): 374sq.m
Martin LC (560 tiles): 1120sq.m
Barco MiPix (6200 tiles):
Element Labs Stealth: 185sq.m

Video Control Equipment
1 x Barco Encore System
24 x Image Pro HD

Projection Equipment
6 x Barco R12 (12000 lumen)
2 x Screens (Size 6 x 4m)
9 x Panasonic PTD 7600
3 x Screens (Size 7 x 7m)
6 x Puffersphere XL 2m with Barco CLM R10+
3 x Christie Roadie 25k
3 x High End Catalyst Orbital Head

Media Servers
24 x HES Catalyst Pro V4
6 x Hippotizer HD V3
4 x Martin Maxedia

Lighting
Total Moving Lights (approx.): 762
Total LED Lights (approx.): 250
Total Conventionals (approx.): 100
Total Power Cable (approx.): 32km
Total of Data Cable (approx.): 24km
Total Generator cable (approx): 56km

Moving Lights
10 x Syncrolite SX3K
56 x Vari-Lite VL3500
135 x Clay Paky Alpha Spot 1200
13 x Vari-Lite VL 3000
400 x Martin MAC 2000 Wash
76 x Martin MAC 600
72 x PRG Bad Boy

Effects/LED
7 x Hungaro Flash 85kW
112 x Atomic Strobes + col. ch.
106 x Thomas Pixelline
140 x CK Colorblast CB12
28 x James Thomas PixelPARs
250 x Element Labs VersaTube HD 1m
16 x GLP Impression

Conventional Luminaires
20 x 2-lites
85 x 4-lites
40 x Source Four 750W (10°)
4 x Robert Juliat Ivanhoe 2.5k followspots
5 x Robert Juliat Korrigan Truss Spot
8 x Robert Juliat Lancelot 4K
250 x PAR 64 Cans

Control
2 x grandMA, plus full backup
16 x MA Lighting NSP (Network Signal Processor)
2 x Virituoso, plus full backup
2 x Digital fibre optic network

Set Lighting
7800 x Schnick-Schnack Strips

Green Room/VIP Area
50 x Fresnel (500W)
50 x Fresnel (650W)
50 x Fresnel (1kW)
40 x PAR 56 (Floor)
20 x Kino Flo
36 x ETC Source Four Zoom
50 x ETC Par
30 x PAR 64 (Floor)
20 x MAC 600
1 x Wholehog 500

Sound
Total Loudspeakers (approx.) 280

Arena Main PA System
18 x Meyer Sound Milo
2 x Meyer Sound Milo 120
38 x Meyer Sound Mica
16 x Meyer Sound 700HP
16 x Meyer Sound 650P

Arena Delay PA System
72 x Panasonic LA3
54 x Dynacord LX3000 amplifiers

Arena Fill PA System
8 x Meyer Sound Melodie
10 x Meyer Sound UPJunior
3 x Meyer Sound CQ-1
2 x Meyer Sound CQ-2
4 x Meyer Sound UPA-1P
4 x Meyer Sound UM-1P

Monitor Speakers
6 x Meyer Sound MJF212
8 x Meyer Sound UM-1P
8 x Meyer Sound USM-100P
2 x Meyer Sound M3D
10 x Panasonic LA3
6 x Dynacord LX3000 amplifiers

Control Equipment
2 x Yamaha PM1D (Monitor)
2 x Yamaha P5D (FOH Music)
2 x Yamaha DM2000 (FOH)
2 x Lexicon 480
2 x XTA DP324 SIDD
4 x CD player
5 x Meyer Sound Galileo
2 x Yamaha DME64
1 x Meyer Sound SIM3
9 x Optocore DD32E
3 x Optocore DD6NE
12 x Yamaha AD8HR
4 x Yamaha AD824
20 x Klark Teknik SquareOne

Rigging
Total Truss (approx.): 4.4km
Total Chain Hoists (approx.): 520
Total Roof Load (approx.): 140 t.
Total Points in Roof (approx.): 900

ChainMaster Hoists
8 x 0.25 tonne
30 x 0.5 tonne
340 x 1 tonne
30 x 2 tonne
16 x VarioSpeed (0.25 tonne)
6 x VarioSpeed (0.5 tonne)
12 x VarioSpeed (1.0 tonne)
4 x VarioSpeed (1.25 tonne)
70 x C1 (0.5 tonne)

Truss
1200m TFL/Thomas Medium Duty
260m Slick Maxi Beam
220m Eurotruss
1400m TFL/Thomas Tower Beam
120m TFL Fold Flat Truss
620m James Thomas Super
650m Prolyte Truss

variety of acts. Gurdon's company, Incandescent Design, was contracted to provide lighting design and front-of-house services for the production. With an astonishing 2000sq.m of LED and over 750 moving lights, the stage was anything but boring. A month of pre-programming on Wysiwyg and ESP by Andy Voller and Ben Cracknell at Essential Lighting's Wysiwyg suite in London made it possible to get the vast rig up and running in time.

"The entire production and the goals of the organisers were ambitious, to say the least, but everything they aimed to do was achieved. It was a challenge to design such a huge variety of looks for the music performances, in a relatively short time period, and then, in a very tight schedule, to add in the interval acts for all three shows, but it all worked," said Gurdon. "The whole Incandescent team would happily do it all over again."

The rig, which extended to every square centimetre of the arena, was carefully chosen by Gurdon to handle the assortment of looks. This included 400 Martin MAC 2000 Washes, 76 MAC 600 washlights and 112 Martin Atomic strobes with colour changers. In addition, making their *Eurovision* debut were 72 Bad Boy luminaires, sub-hired in from PRG to take part in their largest production to date. The Bad Boy fixtures were spaced around the entire rig and positioned directly over the stage to do "just about everything," said lighting gaffer Rich Gorrod. Gurdon added: "For the first time, we have a profile lamp which delivers the intensity capable of delivering diverse looks from a subtle ballad to a burn-your-retinas rock song - all for a stadium-size television show."

The infamous scaffold supporting the roof load and the back screen was also home to 135 Clay Paky Alpha Spot 1200 fixtures - the largest single brand of any spot fixture on the show. The transparency of the screen allowed the beams to shine from behind, creating a spectacular effect. 10 Syncrolite SX 10K fixtures were placed on moving trusses at the back and sides of the stage, beaming from both above and below, while 13 Vari*Lite VL3000s added extra punch.

One Vari*Lite Virtuoso and one GrandMA fullsize console, controlled by Andy Voller and Ben Cracknell, handled all of the stage and audience lighting. A second Virtuoso, controlled by Ian Reith, handled the 24 Catalyst Media Servers managing all of the video content. The lighting desks used CAST Software's wysiwyg for previsualisation. Every console and media server had individual backup.

The assembled Eurovision 2009 crew (most of them, anyway).

In all, there were 17 followspot operators, cued by Peter Canning, using Robert Juliat followspots - eight Lancelot 4k, four Ivanhoe 2.5k and five Korrigan spots - to track not only performers on stage, but the variety of flying objects and performers over the audience.

Video: Pixels for Miles . . .

The video elements used for the stage broke records as well, with every surface from the floor to the ceiling dripping with LED. 374sq.m of Barco O-Lite were used for the stage floor and moving back spines of the stage; 231sq.m of FLED encrusted the inside and outside of the floating ring over the stage; 185sq.m of Element Labs Stealth made a ceiling over the stage; 6200 tiles of Barco MiPix were used for the three matryoshka dolls in the semi-final opening act; and a whopping 1120sq.m of Martin LC screen backed the entire stage.

And there was more: 7800 Schnick Schnack strips were hand-placed inside the top and bottom pieces of the large ring and the half-rings behind the stage. The crew worked out the number of pixels inside the arena and calculated that the content created for each song had 8,743,380 pixels per frame, or roughly 43,716,900,000 pixels for the average duration per song/act, translating to approximately 2,185,845,000,000 pixels for the whole show. If those pixels were mapped onto 50mm resolution Schnick Schnack strips and laid end to end, you could reach to the moon and back 142 times, or travel 75% of the distance to the sun!

Nine Catalyst servers plus nine backups were used for the set, plus three for the mirror head projectors and two running the Timecode/MIDI setup. Each server had one output feeding each area of screen, with some servers feeding multiple areas such as the Stealth ceiling and the matryoshkas. Four servers had four HDSDI inputs to feed live images to the inner and outer ring. All signals were sent from the server room to backstage via fibre optic cables.

Original content was created by Andrey Boltenko, as both creative director and multi-camera director. On-site content was prepared and new content created by his team, and altered to fit the screens by Ian Reith, Nev Bull and Lauren Cahill of Incandescent Design. Content for each song had to be cut to size to fit on the various screen elements - a minimum of eight movies per song. Each server was dedicated to a certain section of the stage, which contained the five different types of video. A Barco Encore system was used to preview all material on all sections.

Ola Melzig and Al Gurdon sharing a 1-hour birthday: Al's was 15 May, Ola's on 16 May, the night of the Final broadcast. As Gurdon is from UK and Melzig is from Sweden, they claimed their birthdays overlapped between 2 and 3am Moscow time on the 16th!

Ola Melzig with Procon's Matthias Rau.

While the stage itself was a sight to behold, the lighting, video and even performers often extended beyond the stage boundaries, out over the heads of the audience. Besides certain acts such as Cirque du Soleil and Fuerza Bruta, there were permanent overhead elements capturing the attention. Procon delivered six Pufferfish PufferSpheres to make their first appearance in Russia, as well as their *Eurovision* debut. The 2m diameter, internally projected inflated spherical displays played a variety of roles throughout the three broadcasts, from giant planets in a starry night sky to digital signage introducing each nation to the audience. The PufferSphere content was delivered from six Green Hippo Hippotizer HD media servers, controlled on a Grand MA Fullsize by Timo Kauristo.

All lighting and video was synchronised via timecode sent from the OB truck. It was converted to MIDI Show Control commands using Catalyst Lite and sent to each of the four consoles. Each song was played back by the operator and the keystrokes recorded into the Catalyst show file. Using an Excel spreadsheet, these were formatted for each of the different consoles and then adjusted to align the cues exactly to the audio.

All media equipment was housed under the bleachers next to FOH, lovingly dubbed the "Media Lounge" set up by Mike Redmer and managed by Nev Bull and Jan Schroeder. "It was called Server Room in all our drawings, but the term 'server room' was a red flag to the fire marshall that this room contained 'dangerous' electronic gear," explains Melzig, "So we changed the name of this area to the 'Media Lounge' in all drawings, and they were cleared and signed off the next day."

Sound

Procon sound designer Klaus Rahe designed the sound system within the walls of Olympiysky Arena consisting of 280 loudspeakers for the main arena, monitor sound, Green Room, Viewing Room and VIP area. David Bergmann, who managed the sound team for the production, described the challenges of the set-up. "Olympiysky Arena is such a large venue, and due to the complex set, it was not possible to put big clusters in ideal positions," said Bergmann. "Instead, we installed a large number of smaller clusters placed wherever they could fit."

The vast majority of the loudspeakers covering the various areas was made up of a combination of Meyer Sound products -

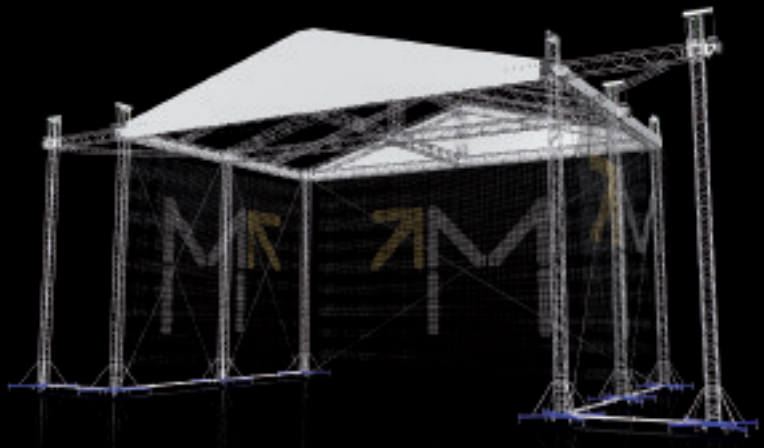
Simple solutions for everyday tasks

Statically Approved

TR Temporary Roofing

(Problem)

(Solution)



Milos Structural Systems

Service is our No 1. product to give you peace of mind when dealing with challenging projects

Milos CZ Milos UK Milos America Milos China

www.milosgroup.com

including Milo, Milo 120, Mica, 700HP and 650HP, M'elodie, UP Junior, CQ-1, CQ-2, UPA-1P and UM-1P cabinets - along with MJF212, UM-1P, USM-100P and M3D for monitors. Sound was mixed from a selection of Yamaha desks including PM1Ds, P5Ds and DM2000s.

Microphones came from Sennheiser - a partner to the production for more than 40 years. Sennheiser's RF expert Klaus Willemsen was on site for a week before the beginning of rehearsals. The wireless microphone and monitor equipment was installed during late April in conjunction with Channel One and Sennheiser Audio (Moscow). Frequency planning was also completed in the weeks running up to the event.

"The incredible amount of lighting technology in the arena means there's also an increase in RF disturbance," said Willemsen. "That's why precise frequency planning and the right choice of antennas and antenna locations are vital."

In total, 56 microphone channels and 16 links for wireless monitoring were employed in Moscow. The artists were given a choice between Sennheiser's SKM 5200 handheld transmitter and KK 105 S Neumann capsule or the SK 5212 bodypack transmitter and HSP 4 headset mic.

While the vocals are live, supporting music for *Eurovision* is all playback - even when instruments are present on stage. The reasons for this are purely practical: the host country would be responsible for providing all additional equipment and crew for sound checking and setting up - plus it would have to be done in the allotted changeover time, which is a mere 30 seconds. Overall, it ends up being cost prohibitive, too risky and impossible to integrate.

When asked about equipment choices, Klaus Rahe of Procon told L&SI: "Reliability is the main issue in an live event like this and Meyer Sound, Yamaha and Sennheiser are the most reliable partners in their field . . . Sennheiser is almost a must at the ESC and has the greatest experience in large-scale wireless set-ups under heavy RF conditions."

Of Meyer Sound he says: "Meyer provides us with the tools needed to succeed in an event like the ESC - starting with the prediction in MAPP online, continuing over system control via several Galileos into a wide variety of speaker models - all measured and Time/Phase aligned by a SIMM3 system."

Rahe continues: "Yamaha consoles, for me, are the most reliable digital consoles on the market. For monitors we used two PM1Ds, at

the FOH we used two PM5Ds for the musicians and two DM 2000s for hosts and video feeds. Secondary consoles were in parallel mode for redundancy - and not needed."

In addition to the extensive Meyer Sound systems, Procon also fielded a Panasonic line array system, which some readers may recall from the Beijing Olympics Opening Ceremony. Rahe says: "For the first time we used our new Panasonic Line Array LA3 that we bought for the Beijing Olympic Games and were very happy with the results that we could achieve by using them for the higher seating areas."

A Fast Goodbye

What took six weeks to build had to come down in just 52 hours. "Once we printed it out, the load-out schedule was taller than me!" said local production manager Gregory Antropov. The set started coming down one hour after broadcast ended on Saturday and was cleared out before 10am on Tuesday morning.

Amazingly, all sound equipment and all 4400m of truss was available in stock directly from the Procon warehouse at the time of specification. Furthermore, all lighting equipment with the exception of the Bad Boys and Virtuoso desks from PRG, all video equipment bar the Catalyst mirror heads and Christie Roadie 25s, and about half of the total LED screen modules, also came from Procon stock (with the remainder sub-hired from companies including XL Video and Massteknik). "If you ever have the opportunity to visit the Procon warehouse in Hamburg, I strongly recommend taking it," commented Melzig, "It's bigger than Disney World! It's quite incredible really."

Procon CEO Morten Carlsson said: "*Eurovision* continues to be a production marvel in so many ways. It's an honour for Procon to be part of this show again."

At the end of it all, Norway was crowned champion with the song *Fairytale*, written and performed by Alexander Rybak. Ironically, Norway now holds two unique records: the most times coming in last (10 times) and the biggest landslide in *Eurovision* history this year with 387 points (169 points over second place). That likely means we will have surprises in store for next year's contest too . . .

MORE ONLINE . . .

View pre-visualisations, lighting plots & videos from Eurovision 2009 online at: www.lsionline.co.uk/Jul09