Starlight Express without Sound?

Bruno Marx, Vice President APWPT
EMR Workshop 25.09.2012
Europe-wide Events: Eurovision Song Contest 2011

- 115 million TV-viewers
- Largest LED screen ever
- Total of 273 PMSE links over 2 weeks
- Major trade fair directly adjacent

„Coordinating the logistics of ESC and Interpack is a nightmare I don‘t want to relive.“  
Ian Hume, Messe Düsseldorf
### Eurovision Song Contest PMSE growth

Growth of PMSE links used only by Song Contest performers

<table>
<thead>
<tr>
<th>Year</th>
<th>Location</th>
<th>Microwave Channels</th>
<th>Microphone Channels</th>
<th>IEM Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>Birmingham / UK</td>
<td>40 ch Mic</td>
<td></td>
<td>2 ch IEM</td>
</tr>
<tr>
<td>1999</td>
<td>Jerusalem / Israel</td>
<td>42 ch Mic</td>
<td></td>
<td>6 ch IEM</td>
</tr>
<tr>
<td>2000</td>
<td>Stockholm / Sweden</td>
<td>48 ch Mic</td>
<td></td>
<td>16 ch IEM</td>
</tr>
<tr>
<td>2001</td>
<td>Copenhagen / Denmark</td>
<td>48 ch Mic</td>
<td></td>
<td>16 ch IEM</td>
</tr>
<tr>
<td>2002</td>
<td>Tallinn / Estonia</td>
<td>54 ch Mic</td>
<td></td>
<td>16 ch IEM</td>
</tr>
<tr>
<td>2003</td>
<td>Riga / Latvia</td>
<td>54 ch Mic</td>
<td></td>
<td>16 ch IEM</td>
</tr>
<tr>
<td>2004</td>
<td>Istanbul / Turkey</td>
<td>54 ch Mic</td>
<td></td>
<td>16 ch IEM</td>
</tr>
<tr>
<td>2005</td>
<td>Kyiv / Ukraine</td>
<td>54 ch Mic</td>
<td></td>
<td>16 ch IEM</td>
</tr>
<tr>
<td>2006</td>
<td>Athens / Greece</td>
<td>54 ch Mic</td>
<td></td>
<td>16 ch IEM</td>
</tr>
<tr>
<td>2007</td>
<td>Helsinki / Finland</td>
<td>56 ch Mic</td>
<td></td>
<td>16 ch IEM</td>
</tr>
<tr>
<td>2008</td>
<td>Belgrade / Serbia</td>
<td>56 ch Mic</td>
<td></td>
<td>16 ch IEM</td>
</tr>
<tr>
<td>2009</td>
<td>Moscow / Russia</td>
<td>56 ch Mic</td>
<td></td>
<td>16 ch IEM</td>
</tr>
<tr>
<td>2010</td>
<td>Oslo / Norway</td>
<td>72 ch Mic</td>
<td></td>
<td>32 ch IEM</td>
</tr>
<tr>
<td>2011</td>
<td>Düsseldorf / Germany</td>
<td>82 ch Mic</td>
<td></td>
<td>40 ch IEM</td>
</tr>
<tr>
<td>2012</td>
<td>Baku / Aserbaijan</td>
<td>104 ch Mic</td>
<td></td>
<td>80 ch IEM</td>
</tr>
</tbody>
</table>
Global Events:
Olympic Games in London

- Several billion viewers worldwide
- Biggest most impressive games ever
- Hundreds of PMSE links in use for over 7 weeks
- Live events, only once in a lifetime
Entertainment:
U2 360° world wide tour

- 10 million watched a live stream on YouTube
- 83 wireless microphones and in ear monitors
- Album sales ↓, Tour productions ↑

“The wireless thing has been a battle here in Barcelona which is a notoriously bad city for RF, with things flying about all over,”

*Dave Skaff, audio engineer*
Musicals: Starlight Express

- Without PMSE, no Starlight Express
- 27 PMSE links used 6 days a week
- Since 1988, a job motor

Superfan Andrea Rau has seen Starlight Express More than 900 times.
Enormous coordination effort
Up to 400 PMSE links used simultaneously

Freedom of Press is a national concern:
According to the Press Freedom Index 2010, Finnland has the greatest freedom of the press.
Corporate Events:
IAA Motor Show, Frankfurt

- Hundreds of PMSE links in use over 7 days
- PMSE = source of income for many

We’ve heard that the next Mondial De L’Automobile in Paris will be using 90 PMSE links during it‘s opening ceremony.
Conclusions

- PMSE has greatly influenced the way the Culture and Creative Industry has grown and prospered.
- PMSE effects everybody's lives.
- APWPT is engaged in continual growth and diversity of the European Culture and Creative Industry.
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