Press release
18th December 2011

Position Paper from the
Theatre Group in the APWPT

APWPT
ASSOCIATION OF
PROFESSIONAL WIRELESS
PRODUCTION TECHNOLOGIES
Erlanger Str. 9, 91083 Baiersdorf, Germany
www.apwpt.org info@apwpt.org

"Fundamentals of Present-Day and Future Use of Wireless Event Technology"

Modern contemporary cultural productions in the performing arts are dependent on the mobile possibilities offered by wireless event technology.

Complex musical productions may very well have the greatest needs in terms of wireless audio technology, but they are only one example of the many possible uses of modern technology.

For many years, especially since the general mandate of 2005, which was an important measure for promoting the event technology sector, wireless technology has become standard and has been used whenever there is a need for mobile audio signal transmission. The additional, wireless transmission of video and control signals is also following this trend and becoming an essential part of any production.

All theatre events are live and unique and cannot be re-performed in the event of technical difficulties. This is why high quality standards and disruption-free technology is needed. The use of wireless technology makes it possible to hold events in locations that would have been out of the question in the past. This is one reason why the number of theatre venues has grown so quickly (as a basis for comparison, there were 728 theatre venues in Germany in 2000 and 888 in 2009).

1. Wireless audio technology

Wireless microphones, in-ear monitors, and mobile wireless audio transmission are part of today's standard production technology and are used, for example, in:

- State theatres and city theatres of all kinds with their own ensemble and productions in the opera, operetta, musical, drama, dance and concert genres
- Regional theatres with guest performances with their own ensemble and productions of all genres
- Theatres and venues for guest performances without their own (artistic) ensemble that host guest performances from other companies
- Private theatres with their own ensemble and productions of all genres

- Open-air festivals, summer festivals, etc. with their own ensemble and productions of all genres
- Guest performance companies with touring productions
- Amateur and school theatres

2. Other wireless event technologies

Wireless technologies are being used for media content and control data in theatres more and more often. These technologies include, for example:

- Wireless video transmissions
- Wireless internal communication on and off-stage
- Controlling (mobile) stage systems and equipment
- Controlling effects, for example, pyrotechnics
- Signalling/alarms (for example, cross-system information in the future)

3. Frequency requirements

Example: every microphone needs its own transmission frequency. This frequency mustn't suffer from interference from any other devices – the potential risks for live productions are too great. The frequencies must be available for use wherever and whenever they are needed in order to enable work on high-quality productions without complication or delay.

Due to its physical properties, the UHF spectrum is particularly well-suited to ensuring the quality of the transmission at all times, especially since the microphone and receiver do not require a line-of-sight connection.

In the past, it was possible to use the UHF spectrum, as the frequency range between 470 - 862 MHz was open for use by wireless technology and so the gaps between television frequencies were used effectively.

A significant portion of this spectrum treasured by the cultural and creative industries was lost through the digital dividend (sale of frequencies for use in mobile communications). Previous users of this range have effectively been cut off.

The consequences:

- Establishments in the cultural and creative industries will have to purchase new systems, which will be very costly.
- Frequencies below 790 MHz must now be requested and purchased, a costly and time-consuming endeavour.

- Installation costs must be funded addition to the procurement of new systems. Any necessary modifications can only be performed during the off-season.
- More users are competing for access to the remaining spectrum from 470 – 790 MHz. This makes it harder to find open production frequencies and requires significantly more planning.

Interim summary:

Any further restrictions in the use of UHF frequencies must be absolutely avoided. Under no circumstances can another digital dividend be supported.

4. Assigning new frequency ranges

There is a continuous demand for alternative and additional frequency ranges to replace the sold frequencies and for the continued development of art and culture (quality, applications in the use of space). This need must compete against the needs of the mobile communications industry, which have been deemed to be greater.

In order to ensure long-term access to a suitable frequency range for artistic and cultural productions and to establish a basis for the development of adequate equipment, the future usability must be ensured for a long period of time. Professional production technology is expensive, which is why it must remain in use for many years. If a switch is to be made to alternative frequencies, there must be a long-term, guaranteed assignment of the frequency range. The current practice of assigning frequencies below 790 MHz only guarantees a short-term period of usability for newly-acquired systems. Since permits are limited to one year, no compensation would be paid if the permit is not renewed; this presents an additional disadvantage for users.

We repeat:

Any further restrictions in the use of UHF frequencies must be absolutely avoided. Under no circumstances can another digital dividend be supported.

Furthermore:

Every new form of frequency use (for example, white space devices) must be reviewed very carefully.

5. European harmonisation

The international exchange of productions, for example, at festivals, is an important part of the cultural and creative industries. In this respect, users in the fields of theatre and concerts welcome any international regulation that allows standard German wireless production methods to be used abroad without any complications and also facilitates collaborations with foreign guests (open international cultural exchange).

If, however, the same requirements for the use of wireless event technology cannot be made in other countries, as many people fear, the APWPT cannot support any international agreements that would have a negative impact on the production conditions in Germany.

Furthermore:

The current compensation model has resulted in a large number of users not receiving any compensation. It has been very unsatisfactory in meeting the actual needs for sustaining high-quality event and theatrical productions.

About the APWPT

APWPT is an international non-profit organisation, which is representing the needs of all users of the Programme Making & Special Event ("PMSE") sector.

Members of APWPT include PMSE organisations, users and manufacturers. The APWPT directly and indirectly represents far over 25,000 members of the PMSE community in Europe and beyond.

PMSE is crucial on a daily basis for the production of content that has received world-wide acclaim and continues to attract a global audience. A vast array of organisations are reliant on radio spectrum for the production of content for Performing Arts, Broadcasting, News Gathering, Independent Film and TV Production, Corporate Events, Concerts, Night Venues, Sports Events, Churches, etc. In addition, other sectors that utilise the current UHF spectrum include the Health Service, Education, Local Government, Political Programming and Conferencing.

For more information about the goals and achievements of the APWPT please visit our website at www.apwpt.org or contact us at

Association of Professional Wireless Production Technologies e. V.
c/o Matthias Fehr
Erlanger Str. 9
D-91083 Baiersdorf
Tel.: +49 (0) 9133 60 76 864
Fax: +49 (0) 9133 60 76 865
E-Mail: info@apwpt.org