

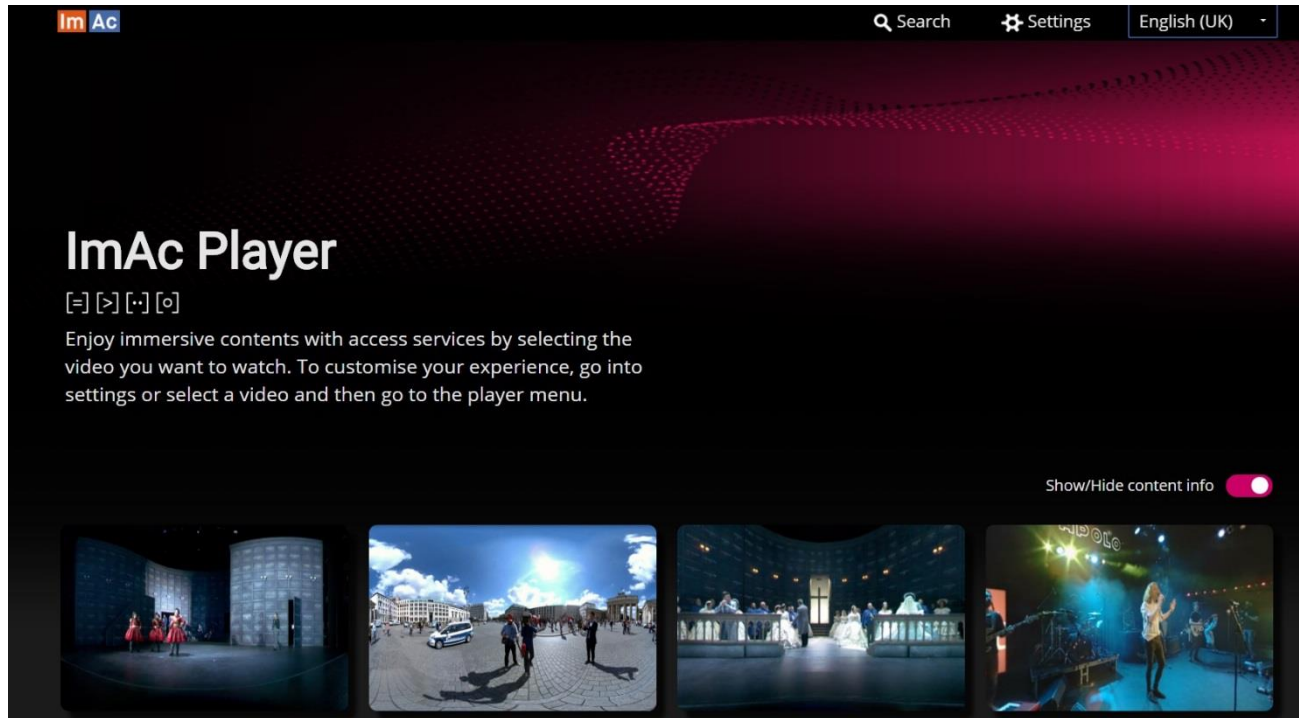
# AUDIO DESCRIPTION IN 360° VIDEOS RESULTS FROM USABILITY TESTS

Media for All 8 –19 June 2019  
Anita Fidyka, UAB



# AUDIO DESCRIPTION IN 360° VIDEOS

## AIMS AND OUTCOMES



# AUDIO DESCRIPTION IN 360° VIDEOS

## AIMS AND OUTCOMES

**USER-CENTERED**

**DESIGN**

**SERIES OF**

**FOCUS GROUPS**

**USER**

**REQUIREMENTS**

# AUDIO DESCRIPTION IN 360° VIDEOS

## WHAT ARE 360° VIDEOS?



# AUDIO DESCRIPTION IN 360° VIDEOS STORYTELLING

## LINEAR STORY BUT NEW WAY OF INTERACTION

USER STANDS IN ONE PLACE  
& CAN LOOK AROUND

1 BY HEAD MOVEMENTS

USER FOLLOWS THE STORY  
OR IGNORES IT

2 BY LOOKING AROUND

AUDIO DESCRIPTION IN 360° VIDEOS

IMPACT OF STORYTELLING ON AD

**A NEW APPROACH FOR PRODUCING AD IS NEEDED  
TO GUIDE USERS WITH SIGHT LOSS EFFECTIVELY.**



# AUDIO DESCRIPTION IN 360° VIDEOS

## DYNAMIC



CLASSIC

# AUDIO DESCRIPTION IN 360° VIDEOS

## DYNAMIC



CLASSIC



STATIC



# AUDIO DESCRIPTION IN 360° VIDEOS

## DYNAMIC



CLASSIC



STATIC



DYNAMIC

# AUDIO DESCRIPTION IN 360° VIDEOS

## AD EDITOR

The screenshot displays the ImAc Web AD Editor interface. The top bar shows the ImAc logo, a task list, and the current window title 'Web AD Editor'. The main interface is divided into several panels:

- Asset details:** Shows metadata for asset ID 522 (119), including title 'Task', programme ID, type 'Dynamic', gain levels, language 'British English', creation date '2018-12-18', video size '2372 MB', and duration '00:05:38.24'.
- Video controls:** Features a central video player and a timeline with playback controls (stop, play, pause, next, previous, full screen, etc.).
- Segment list:** A table with columns for segment ID and time range. It contains one entry: '1' with a range of '00:00:00.00' to '00:00:00.00'.
- Recording controls:** Includes a 'Record' button, an 'Audio level' meter, and buttons for 'Short test' and 'Long test'. A 'Dipping' section offers options for 'None', 'Low', and 'High', with a 'Keep attenuation' checkbox.
- Segment controls:** Located at the bottom left, it includes 'Move' (directional arrows), 'Actions' (IN, OUT, and other icons), 'Find/Replace' (magnifying glass), and 'Mode' (edit, forced preview, free preview).

Yellow boxes highlight the 'Recording controls' and a section of the 'Segment controls' containing time input fields and a vertical volume slider.

This panel provides detailed controls for the selected segment:

- Move:** Includes directional arrows and a lightning bolt icon for zooming, with a range indicator '(1 - 10)'.
- Actions:** Features 'IN' and 'OUT' buttons, a plus sign, a minus sign, and three person icons representing different actions, with a 'lat: 0.00 lon: 0.00' label.
- Find/Replace:** Contains two magnifying glass icons for search and replace.
- Mode:** Offers radio button options for 'edit', 'forced preview', and 'free preview'.

AUDIO DESCRIPTION IN 360° VIDEOS

USABILITY TEST

**ONLINE TEST**

**24 SEPTEMBER – 19 OCTOBER 2018**

**24 PARTICIPANTS FROM DIFFERENT COUNTIES**

**SOUND OPTION TESTED: DYNAMIC**

**QUESTIONNAIRES IN ENGLISH**



# AUDIO DESCRIPTION IN 360° VIDEOS

## MEASURES

### **MEASURES: USABILITY & PREFERENCES**

#### **QUESTIONNAIRES:**

- **DEMOGRAPHIC PRE-QUESTIONNAIRE**
- **POST-QUESTIONNAIRE: SYSTEM USABILITY SCALE (SUS)  
AND PREFERENCES**

# AUDIO DESCRIPTION IN 360° VIDEOS

## PROCEDURE – SUBSEQUENT STEPS

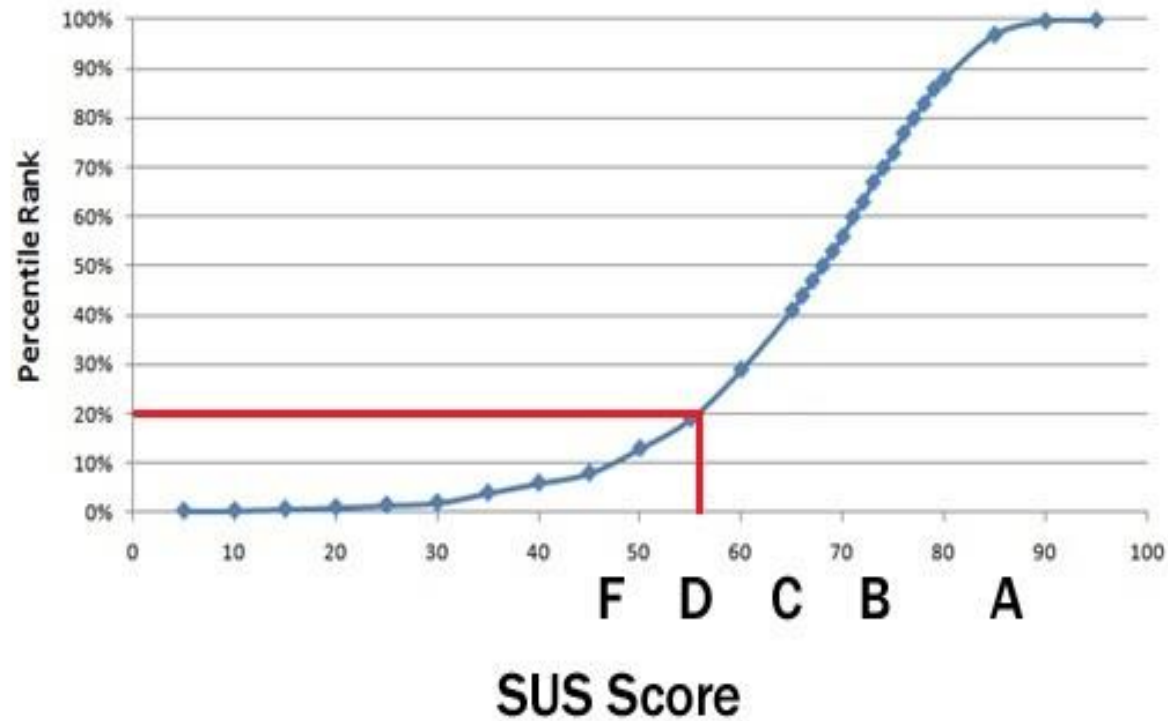
### **TASKS IN THE EDITOR:**

- **ADD AD INSTANCES AND CORRECT TIMECODES**
- **SET AN ANGLE FOR EACH AD SEGMENT**
- **RECORD THE AD**
- **PREVIEW THE VIDEO IN FREE AND FORCED PREVIEW**

# AUDIO DESCRIPTION IN 360° VIDEOS

## RESULTS – SYSTEM USABILITY SCALE

**SCORE: 55.9**



# AUDIO DESCRIPTION IN 360° VIDEOS

## RESULTS – PREFERENCES

### PLUSES

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- ONLINE SOFTWARE
- LAYOUT OF THE INTERFACE

### MINUSES

- RECORDING AND PREVIEW
- CUSTOMIZING THE SHORTCUTS
- PLAYING THE VIDEOS

# AUDIO DESCRIPTION IN 360° VIDEOS

## PROPOSED FUNCTIONALITIES

### STANDARD

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- WAVEFORM
- SPEECH SYNTHESIS
- PREVIEWING WITH HMD
- EXPORTING THE SCRIPT
- HEADPHONES
- ADJUSTING THE VOLUME OF AD
- IMPROVEMENTS RELATED TO VIDEO AND SEGMENT CONTROL BAR

### IMMERSIVE

- MAP WITH ALL AD LOCATIONS DISPLAYED



# AUDIO DESCRIPTION IN 360° VIDEOS

## RESULTS – SETTING THE ANGLE

- **75% PARTICIPANTS FOUND IT EASY TO USE**
- **SETTING THE ANGLE ONLY FOR SOME EVENTS**

AUDIO DESCRIPTION IN 360° VIDEOS

CONTENT SELECTION

**CHALLENGING**

**COOPERATION WITH CONTENT CREATORS**



# AUDIO DESCRIPTION IN 360° VIDEOS

## CONCLUSIONS

**The study allowed us to assess the progress made  
in the development of the tool.**

**It also allowed us to better understand the needs of professional  
audio describers.**

**Further studies could include:**

- **measuring presence of participants when presented with AD/AST and spatial sound**
- **more studies on AD in more complex VR types.**



<https://imac.gpac-licensing.com/player/>

<http://www.imac-project.eu/>

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# AUDIO DESCRIPTION IN 360° VIDEOS

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