

# Usage scenarios



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# 1 Executive Summary

This document describes two extensive scenarios that demonstrate the production of spatially outspread live events as envisioned within the ICoSOLE project.

The first scenario handles about a city festival (such as Gentse Feesten, Glastonbury, ...). The second scenario shows the ICoSOLE vision within a cyclocross race.

Both scenarios consist of 3 parts. The first part is the preparation of the production, where all kind of technical, administrative and descriptive metadata are created in order to prepare an efficient production. The integration of user generated content is taken into account from the preparation onwards with the help of a user generated content request and response platform.

The second part is the production itself where live editing on many different heterogeneous content streams is the main challenge. It also takes into account incoming content from the user generated content request and response platform. The output is one or more broadcast streams. Moreover, a post-production allows for editing more content. The third and final part of the scenarios consists of the consumption of the created content in an immersive way, both live and on-demand, and on both TV as well as mobile devices.

Furthermore, the scenarios have been analysed and a set of system components (user interfaces) and use cases have been identified. They are listed in sections 5 and 6 of this document respectively. Finally, for each of the general use cases, a list of potentially contributing ICoSOLE partners has been created. This list can be found in section 7.



# 2 Introduction

# 2.1 Purpose of this Document

This deliverable contains the description of two usage scenarios that the project will take into account. Major focus has been set on choosing two different examples, each representing a music festival and a sporting event.

# 2.2 Scope of this Document

In regard of the two abovementioned usage scenarios, a list of derived use cases and a list of identified components have been derived, which will be displayed in condensed form at the end of the deliverable (sections 5 and 6).

### 2.3 Status of this Document

Version 07, final version after internal review.

### 2.4 Related Documents

None



# 3 Usage scenarios

This section describes 2 usage scenarios. The first one describes a large music festival (such as Gentse Feesten in Belgium or Glastonbury in the United Kingdom), the second one is about a sports event (such as a cyclocross race).

The text also contains the results of a first use case and requirements analysis. The text in bold describes a use case, whereas the text *in italic* should be taken into account as a requirement. The numbers of the use cases refer to the list of use cases in section 5.

# 3.1 Large music festival

#### 3.1.1 Preparation of a large festival

Within a few weeks, the famous city festival "Gentse Feesten" will take place. A producer (David) has received the order to make a production covering as much of this festival as possible for both live and on-demand catch-up. Moreover, his employer wants this production to be as immersive as possible for people at home. In such a city festival, there are many things happening simultaneously in many different locations and the producer would need a small army to cover most of the event. David is however on a tight budget and will need to use innovative systems in order to succeed in his task. Several months ago, he already assembled a small production team with equipment that will produce the broadcast on the spot. However, this will not be sufficient to cover the event. David will need an innovative system able to cope with many different kinds of inputs to be successful.

In order to prepare his program, David logs on to the ICoSOLE production preparation application (UC-1.1.1) and starts preparing the broadcast. After entering some technical and management details and metadata (UC-1.2.2) in the application, he is ready to start. Also, he enters details on the available production crew (UC-1.2.3). He then connects the application to the event calendar of the city festival (UC-1.3.1), which is easy because it is available as linked open data. The ICoSOLE system regularly queries the data sources about the festival, and thus is up-to-date on changes of the schedule of the festival, even while the event is already ongoing (UC-1.3.1). The application immediately shows the event calendar on a timeline and sorted by event location (UC-1.3.2). This makes it easy for David to assess the conflicts and choices he has to make. First, David browses through the event calendar (UC-1.3.3) and selects all events of the festival (UC-1.3.4) that he is interested to capture and broadcast.

After this exercise, David can assign the available production teams (UC-1.2.4) to the different events he wants to cover. The application automatically takes into account that a production team cannot be in two locations at the same time, and that moving a production team from one spot to another on the same day is nearly impossible because streets are overcrowded with people. Due to this, a lot of events that David had selected as interesting cannot be covered with a professional production team or by professional audio production only. In order to solve this problem, David accesses the ICoSOLE user generated content (UGC) request & response platform (UC-1.5.1) from his production application. He selects all remaining events and enters them in the UGC request & response system (UC-1.5.3) together with the needs of coverage in terms of audiovisual or video only. This immediately issues orders onto the platform which non-professional users can respond to (UC-1.5.4). It also allows providing rewards for people responding to specific UGC requests.

Lucy is a non-professional and video production hobbyist. She knows the ICoSOLE UGC request system very well, and has already created an account on the system (UC-2.1.1). She regularly logs on to the platform (UC-2.1.2) and checks new orders issued into the system (UC-2.2.1) using the smartphone application. She spots the request to contribute some content for the festival and is by the attractive reward offered for contributing (a signed copy of the artist's new album). Lucy confirms that she intends to contribute (UC-2.2.2). By this confirmation, the event is automatically added to her agenda (UC-2.2.2.1) and also producer David is informed of this intention (UC-2.2.2.2.2).



Finally, David also decides to **look into the archive for archive material related to the event (UC-1.4.1)**. After finding suitable material, he **selects times at which this material could be broadcasted (UC-1.4.2)**. This will allow the production crew to seamlessly integrate this archive material within the live event broadcast.

#### 3.1.2 Production at a large festival

Once on the spot, David coordinates the preparations. Professional audio/video capture teams are placed as prepared in the ICoSOLE application (UC-3.1). Moreover, David was able to negotiate to place microphones and cameras and professional audio production for radio on several locations. Data describing the audio signal (e.g. microphone arrangement, microphone positions, capsule type, sampling rate, etc.) to be recorded and fed into the audio metadata gathering procedure (UC-3.4.1). These production crews are fixed on different stages, also stages that are not covered by any professional video production team. Also Lucy is on the spot. She logs on to the UGC platform (UC-2.2.2) and is ready for capturing her part of the event. By checking in, the system automatically captures time, location and event (UC-2.3.2.1) and assigns the recorded content to the corresponding request (UC-2.3.2.2). In return for her contribution, Lucy receives a reward, such as a voucher (UC-2.4.2).

In the central outside broadcast van, two people (Lisa and Eugene) are collaborating to generate the linear broadcast program. The *linear broadcast is generated with a slight delay* in order to give the people some headroom for selecting the content. They have a neat user interface (UI) in front of them, showing a time-aligned overview of all incoming audio and video sources sorted by location (UC-3.2.1). Also the contribution of Lucy on the UGC contribution platform is available, as well as other different coincidental contributions that made it through the automatic quality analysis filters (UC-3.2.1.1). Of course the preparation of the producer is also visible in this UI (UC-3.2.2). Audio and video sources that arrive from selected locations are highlighted. Moreover, as the system also knows the schedule, the performing artist and location are displayed for each of the video sources (UC-3.2.2.1). Furthermore, the archive material that was prepared by David during preproduction is also displayed as an available content stream for play-out (UC-3.2.9). Finally, some quick editing is performed on the live stream such as equalization and color grading (UC-3.2.10).

Using the platform, Lisa and Eugene easily select the audio and video input to be broadcasted (UC-3.2.3). The ICoSOLE components ensure that they are time aligned. The audio scene defined by the selected sources is rendered for monitoring purposes (UC-3.4.2). Novel production tools are used to create and modify the audio scene (UC-3.4.4), both modifying the meta-data of the selected audio objects, including the spatial position, and modifying the audio signals, with equalization for example. They also select which audio objects have interactive properties and define the scope of those interactions (UC-3.4.3) to allow consumers to adjust their audio experience within defined editorial constraints. Furthermore, the system allows them to check and modify the spatial compositing of the scene and define transition options (UC-3.3.2).

Using the live production tool, Lisa is able to compose the linear broadcast from the selected input media streams. She is able to configure simple transitions and graphics overlays that are rendered in real time by the playout engine. She is able to **quickly use already prepared graphics templates** (provided by **UC-1.2**). For instance, she chooses a lower-third template, fills out the text placeholders with a short description of the stage that is currently shown, and sends this graphics on air. She might also use **graphics that are the product of advanced video rendering (UC-3.4)**, like an interactive map of all recorded locations.

After the event, Lisa and Eugene can browse all audio and video content that was captured live, with associated meta-data describing the content and the captured scene, as well as any content subsequently ingested into the system (UC-3.5.1). The content set also contains some extra UGC contributions created with a semi-professional camera. The edited scenes that were created during the live broadcast are also available to browse. Queries are made to select and view a subset of content from this collection (UC-3.5.2) for selection and inclusion in an edit, some of which were defined during production preparation. Content meta-data is updated and enhanced, both using (semi-) automated analysis tools and manually, through a simple user interface (UC-3.5.3). Some edits that were made during the live broadcast are refined and/or extended with new content and new



edits are also made from selected source material (UC-3.5.4). The tools used for content selection, scene creation, and monitoring of audio and video are similar to those used in live editing.

Lisa and Eugene select edited audio and video content to be made available for on-demand consumption by the audience (UC-3.5.5). They also define parameters of interactivity in the user experience, including both content navigation and consumption (UC-3.5.6), creating appropriate meta-data where required through novel production tools.

#### 3.1.3 Consumption of large festival

Gerald is at home, unable to attend the event. However, he has a state of the art audiovisual home TV system available. He tunes his TV to the live broadcast of the festival (UC-4.1.1) and enjoys the superior quality of both audio and video feeds. This experience is close to being live on the spot. Gerald prefers to listen to the music with less crowd noise, so he chooses the audio configuration where the crowd audio is reduced (UC-4.1.2).

Also Mary was unable to attend the event because she had to work. Due to this, she also missed the linear broadcast. Luckily, it is possible to re-experience the event on-demand. Mary is now at home and invited some friends to enjoy the on-demand playback (UC-4.2.1) together and have a fun evening at home. The ICoSOLE platform has a second screen application for mobile devices that allows the consumer to browse through all available content (UC-4.2.2) (the content selected by Lisa and Eugene), neatly sorted by time, location and performing artist. Upon selecting content (UC-4.2.3) she wants to experience, the content is automatically played on Mary's state of the art audiovisual home TV system (UC-4.2.3.1). Moreover, using the ICoSOLE platform, Mary is also able to seamlessly move through all different camera and audio streams creating a new immersive experience of the event at home (UC-4.2.4 and UC-5.2). In this way, Mary really enjoys the performance of the artists she had missed. It almost feels like being there live and gives her the freedom to navigate through the festival as walking across the different stages and selecting the events and music she likes most. She can also control the audio reproduction (UC-4.2.5.1) including muting the commentary, adjusting the crowd noise, choosing an alternative position in the audience, and selecting 3D audio content for her 3D audio loudspeaker reproduction system enjoying the enhanced envelopment bringing the live atmosphere to her living room. In fact Mary is invited by some other friends on the following weekend to experience the festival again with a complete different choice of program. This time she and her friends decided to experience the content on their mobile devices themselves (UC-5.2), enjoying the new experience of binaural audio reproduction (UC-5.2.3)

#### 3.2 Sports event: cyclocross

#### 3.2.1 Context

Cyclocross is a very popular winter sport in Belgium. Top contenders are competing each weekend on closed circuits, riding on special bicycles through muddy fields and technical forest trails. Most top races (e.g. World Cup and Superprestige races) are covered live on TV by deploying a fully equipped production team and outside broadcast truck that produces the broadcast on the spot. Typically, about ten professional cameras are spread over the circuit, together covering every inch of the race. Depending on the importance of the race, cyclocross attracts between ten and twenty-five thousand spectators on location. Live coverage on television is also very popular, especially on a winter Sunday, with often more than 500,000 TV viewers or a market share of 50% or even more.

However, due to budget restrictions, not every single cyclocross race can be covered, especially the ones organized midweek and that are not part of a season-long competition. Nevertheless, the best riders are also present in these types of races. In these cases, cyclocross fans can normally only view a short summary of the race during the sport news program in the evening, based on some images acquired by a portable camera on tape.



#### 3.2.2 Preparation

Just before the Christmas period, an out-of-competition cyclocross race will take place. All top contenders are present, but the race is not planned to be broadcasted live on television - no professional production team will be deployed. Nevertheless, producer Gary has received the order to make a small-budget, best-effort live race coverage based on user generated content by spectators on the spot. A possibly incomplete, but yet clear impression of the race should be streamed on the web and mobile devices for both the present spectators and especially the fans at home or at work. The goal is to follow the race development (front riders and chasers) as accurate as possible along the circuit and to increase the immersive experience by also covering the race preparation and the race ceremony afterwards from different standpoints.

In order to complement the UGC contributions, Gary also hired a camera man Greg who will acquire professional content on some strategic locations during the race. Greg will use an *IP-based camera*, which was only bought recently by his company. This will allow him to contribute to the live feed of race impressions, but the acquired content will also form the base for the race summary. In addition to that, *unmanned small panoramic multi-camera units are set-up* to ensure that no important event goes unnoticed along the track. In the top-races, an array of cameras would be set-up along the last 100 meters as to *provide a virtual rail camera*, allowing travelling smoothly along with the leading group of cyclists, but without any moving parts.

In order to prepare the extra coverage of the midweek cyclocross race, Gary logs on to the ICoSOLE production preparation application. He creates a new production (UC-1.2.1) and enters some technical and administrative metadata (UC-1.2.2), also indicating that it concerns a non-professionally covered production. He checks the agenda of the available cameramen (UC-1.2.3) and makes a reservation for Greg. He adds the itinerary of the closed circuit (UC-1.3.5) (containing the necessary GPS data) which has been made available as linked open data, and also indicates the most interesting spots. One of the indicated spots is a steep hill in the middle of the lap. In this race, the decision is often made on this short but challenging obstacle. Then he segments the overall circuit loop in different sections which will allow the system to group user generated content together based on location (UC-1.5.4). Among others, these sections include the "material zone", where riders can change their bike, the start zone and the finish line. He also adds three extra events to which people can contribute (UC-1.5.2): race preparation (warming up), race ceremony (podium) and interviews. Finally, he adds the race participant list (UC-1.3.6) as soon as it is available.

Gary has access to the ICoSOLE user generated content (UGC) request & response platform from his production application. He enters the race in the UGC request & response system and enters some preferred locations (UC-1.5.5) which will likely be used in the live stream. This immediately issues orders onto the platform (UC-1.5.4) which non-professional users can respond to. They are encouraged to contribute by offering possible ticket reduction for people responding to specific UGC requests, based on the delivered quality and the final usage of the produced content.

Emma is a cyclocross enthusiast and a big fan of Sven Nys, the best cyclocross rider ever. She was planning to attend the midweek race and notices the ICoSOLE UGC request. She **confirms that she intends to contribute (UC-2.2.2)** and indicates that she will try to capture pre-race content of her idol Sven Nys. As she is a member of his fan club, she hopes to be able to interview him shortly before the race. If necessary, she can show an ICoSOLE accredited interview badge (**provided by the app (UC-2.3.1)**) to him, hereby ensuring that the interview is meant to be streamed by the ICoSOLE platform.

Gerald is also a regular visitor of cyclocross races and is on holiday on the day of the race. He also gets an invite from the ICoSOLE UGC request application, and is delighted to find out that he can *win a free ticket* for the world championship if he is selected as the best contributor after the race. He also sees the special request to film the warming up of the world champion Niels Albert, who is not yet addressed. **Gerald confirms to cover this as well (UC-2.2.2)**.

#### 3.2.3 Production

On the day of the race, Emma has arrived early and she waits for the arrival of Sven Nys' mobilhome. She starts the ICoSOLE app on her smartphone and checks in (UC-2.3.2); the system automatically captures time and location (section) (UC-2.3.2.1). She films the warming-up of



Sven and other riders (UC-2.3.3). She is able to ask Sven some pre-race questions and adds this clip to the interview section of the app (UC-2.3.4). Meanwhile Gerald is capturing the preparations of Niels Albert (UC-2.3.3). He notices that Albert has a cold and adds this metadata to the clip (UC-2.3.5). Then he hurries to the steep hill, in order to get a good stand for filming the race. He really hopes to win a World Championship ticket.

On the spot, Elise is in charge of supervising the live streaming of the race, which is *slightly delayed* to enable content selection. Via a clear user interface, she has an overview of the different UGC contributions in each section at any time (UC-3.2.1 / UC-3.2.1.1). She checks if the stream produced by the ICoSOLE automatic content filtering and selection is in sync (UC-3.2.4) with what happens in the race. The *ICoSOLE system is supposed to be able to follow the rhythm of the race from section to section, based on specific algorithms* (UC-3.2.5). If necessary, Elise can do manual interventions to select the correct section (UC-3.2.6) or to improve the quality by selecting more appropriate contributions for a specific section (UC-3.2.6). She checks if the UGC content is neatly mixed with the professional content captured by Greg. She can also send messages to UGC contributors (UC-3.2.7 / UC-2.3.6) if a section is interesting but not well covered. From time to time, the system *detects an incident happening in the race*, based on an unusual number of contributions at an unexpected location at that time. The detected incidents are highlighted to Elise (UC-3.2.8). The unmanned panoramic camera units provide overview shots of the incident and telling the story that happened right before the incident by means of telestration in summaries after the competition.

Gerald notices that his contributions have not yet passed the automatic quality analysis filters (UC-2.4.1) and he looks for a capturing location with better light conditions. Cameraman Greg has filmed on the different locations including the finish and also captures the podium (UC-3.6).

All **filtered UGC and professional content is stored (UC-3.3.1)** to be made available for producing the sports news summary.

#### 3.2.4 Consumption

George is at home, unable to attend the race. However, he starts the ICoSOLE web app to view the live stream of the race on his tablet (UC-5.1). Before the race, he is able to select his favorite rider (UC-5.1.2) which he can follow during the warming-up. He also can play any available interview. He then follows the race and gets intrigued by the spectacular climb in the middle of the lap. The app allows him to "lock" the viewing location (UC-5.2.1) to that section in order to see every rider passing this obstacle including the less gifted riders. Then he switches back to the front of the race (UC-5.2.2), but he discovers that his favorite rider Štybar is no longer in front. He steps back one section (UC-5.2.2) on the timeline and follows Štybar for a while, sometimes switching back and forth between sections to see what happens in the front of the race. For George, it is an exciting experience to be able to watch this midweek race on his tablet, almost as if he was on the spot.

Later that evening, Brad returns home after a working day, switches on the television and watches the sports news show in order to see a summary of the cyclocross race. Due to a good mix of professional and UGC content, Brad gets a detailed overview of how the race unfolded. He also sees the UGC pictures of the crash of Sven Nys, which explains why he was not on the podium at the end of the race. He wants to know more about the crash and turns on his tablet in order to launch the ICoSOLE app, where he can **review multiple clips of the crash from different angles (UC-5.1.1)**.



# 4 System components

The list below contains the system components / user interfaces that have been identified from the usage scenarios:

- 1. Broadcast preparation application
- 2. User generated content request & response platform
  - a. Management application for entering and editing requests
  - b. End-user application for viewing, subscribing, checking-in, uploading/streaming, and possibly also content processing)
- 3. Production application
  - a. Automatic services (ingest, content analysis, pre-selection, compositing, rendering)
  - b. Content selection user interface
  - c. Content composition user interface
  - d. Live production tools
  - e. Encoding
  - f. Post-production interface
- 4. Home TV system
  - a. Web-based consumption application
- 5. Mobile consumption application



# 5 List of use cases

The following list contains the use cases that have been identified in the scenarios. The numbers refer to the numbers referenced in the scenario text.

## 5.1 UC-1 Production preparation

#### UC-1.1 General administration

UC-1.1.1 Logging in into the production preparation platform

UC-1.1.2 Managing crew details

### UC-1.2 Managing production

UC-1.2.1 Create a new production

UC-1.2.2 Entering technical and management metadata

UC-1.2.3 Checking the crew calendar

UC-1.2.4 Assigning production crew to locations

#### UC-1.3 Event Calendar & locations

UC-1.3.1 Connect to event calendar

UC-1.3.2 Displaying sorted event calendar on timeline

UC-1.3.3 Browsing through the calendar

UC-1.3.4 Selecting events and locations for capturing

UC-1.3.5 Adding itinerary

UC-1.3.6 Adding festival line-up/race participant list

### UC-1.4 Preparing archive material

UC-1.4.1 Searching for archive material

UC-1.4.2 Selecting preferred times for archive playout

## UC-1.5 Access to user generated content request & response platform

UC-1.5.1 Accessing user generated content request & response platform

UC-1.5.2 Adding events

UC-1.5.3 Adding event capture requests into the application

UC-1.5.4 Issuing requests on the UGC R&R platform based on event and locations

UC-1.5.5 Entering preferred locations

### 5.2 UC-2 User generated content request & response platform

#### UC-2.1 General administration

UC-2.1.1 Create account on UGC R&R platform

UC-2.1.2 Logging in into the UGC R&R platform

#### UC-2.2 Checking & choosing requests (preparation)

UC-2.2.1 Checking orders issued on the platform

UC-2.2.2 Confirming to contribute to a particular request

UC-2.2.2.1 Adding the event to a personal calendar

UC-2.2.2.2 Informing the producer of the intention

### UC-2.3 UGC Capturing (during event)

UC-2.3.1 Showing an ICoSOLE accredited badge

UC-2.3.2 Check-in for capturing

UC-2.3.2.1 Date, time and location are recorded

UC-2.3.2.2 Assigning an recorded item to a request

UC-2.3.3 Filming the event

UC-2.3.4 Uploading content/streaming content

UC-2.3.5 Adding metadata to a recording

UC-2.3.6 Receive messages from producers

#### UC-2.4 Post capturing

UC-2.4.1 Viewing feedback from automatic quality analysis of contributed content

UC-2.4.2 Receiving voucher for contributed content



# 5.3 Production application(s)

#### UC-3.1 Review production preparation during event set-up

#### UC-3.2 Live editing

UC-3.2.1 Showing a time-aligned overview of all incoming audio and video sources sorted by location

UC-3.2.1.1 Including (coincidental) UGC

UC-3.2.2 Displaying the preparation of the producer in the application highlighting A/V from selected locations.

UC-3.2.2.1Displaying artist/location for each of the video sources

UC-3.2.3 Selecting the audio and video content to be broadcasted

UC-3.2.4 Checking synchronization between event and recordings

UC-3.2.5 Automatic pre-selection of live content

UC-3.2.6 Manually override events / locations

UC-3.2.7 Sent messages to UGC contributors

UC-3.2.8 Highlighting automatically detected incidents

UC-3.2.9 Including archive material in play-out

UC-3.2.10 Performing final editing (equalization, color grading)

UC-3.3 Data and metadata management

UC-3.3.1 Storing contributed content

UC-3.3.2 Checking/modifying spatial compositing of scene, defining transition options

UC-3.4 Audio scene creation & rendering

UC-3.4.1 Microphone/source positional metadata ingest

UC-3.4.2 Rendering of audio objects for production monitoring

UC-3.4.3 Generating interactivity parameters for audio objects

UC-3.4.4 Modifying the selected audio objects to define the audio scene

UC-3.5 Post-production

UC-3.5.1 Browse available content

UC-3.5.2 Filter content collection with gueries

UC-3.5.3 Meta-data enrichment

UC-3.5.4 Editing (A/V selection, scene creation, and rendering)

UC-3.5.5 Selecting audio and video content for on-demand

UC-3.5.6 Defining audience interactivity

UC-3.6 Professional content capturing

# 5.4 UC-4 Playback on TV

### UC-4.1 Live playback on TV

UC-4.1.1 Tuning the TV to the live broadcast

UC-4.1.2 Selecting different audio playback styles.

UC-4.2 On-demand playback on TV

UC-4.2.1 Watching on-demand playback

UC-4.2.2 Browse through all available content

UC-4.2.3 Selecting content for playback

UC-4.2.3.1 Automatic playback on the home TV system

UC-4.2.4 Seamlessly move through all different camera and audio streams

UC-4.2.5 Interactive audio playback

UC-4.2.5.1 Control over selection of audio objects and rendering

## 5.5 UC-5 Playback on mobile device

#### UC-5.1 Playback live stream on mobile device

UC-5.1.1 Selecting camera position

UC-5.1.2 Selecting favorite artist/athlete

UC-5.2 Playback of on-demand content on a mobile device

UC-5.2.1 Lock onto specific locations or events



UC-5.2.2 Selecting specific events / locations for playback UC-5.2.3 Binaural rendering for mobile



# 6 Use case overview

The following table contains the top-level use cases and also shows the partners' involvement into the use case definitions. The elaboration of the use cases is work in progress and will be described in deliverable D2.2 (use cases and requirements), which is expected to be published in June 2014.

Use case	Name	Partners						
		JRS	DTO	VRT	iMinds	ВІТ	BBC	TaW
1.1	General administration			Х				
1.2	Managing production			Х				Х
1.3	Managing event calendar & locations			Х				
1.4	Preparing archive material			Χ				
1.5	Access to UCG R&R			Х		Х		
1.6	Site survey for professional capture	Х			Χ			
2.1	General administration of UGC platform		Х	Х		Х		
2.2	Checking & choosing requests		Х	Χ		Х		
2.3	Capturing		Х	Χ		Х		
3.2	Live editing	Х			Χ			Х
3.3	Data and metadata management	Х	Χ	Χ			Х	
3.4	Scene creation & rendering	Х	Х		Χ		Х	
3.5	Post-production			Х			Х	
3.6	Professional capturing			Х	Χ		Х	
4.1	Live playback on TV				Χ	Χ	Χ	
4.2	On-demand playback on TV		Χ			Χ	Χ	
5.1	Live playback on mobile device				Χ	Χ		
5.2	On-demand playback on mobile device		Χ		Χ	Χ		

Table 1: General use cases and involved partners



# 7 Conclusions

This document described 2 extensive scenarios for the ICoSOLE project. An analysis of these scenarios has resulted in a list of identified system components (user interfaces) and an initial list of use cases (general ones containing more detailed ones). For the general use cases, a table with partner involvement has also been prepared.



# 8 References

D2.2 – ICoSOLE Deliverable 2.2: Use cases and requirements. Expected publication in June 2014.



# 9 Glossary

# **Acronyms**

A/V Audio / Video

R&R Request & Response

UC Use Case

UGC User Generated Content

UI User Interface

### **Partner Acronyms**

BBC British Broadcasting Corporation, UK

BIT Bitmovin GmbH, AT

DTO Deutsche Thomson OHG (Technicolor), DE

iMinds iMinds Vzw, BE

JRS JOANNEUM RESEARCH Forschungsgesellschaft mbH, AT

TaW Tools at Work Hard+Soft Vertriebsgmbh, AT

VRT De Vlaamse Radio en Televisieomroeporganisatie NV, BE

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