

# Case Study



#### **Summary**

Jørgen Aass' Risk Assessment approach for major event projects

#### The need

An in-depth understanding of the risks scenario's related to event management projects.

#### The solution

Risk assessment with help of a visual tool, BowTieXP.

#### The benefits

BowTieXP enables to easily create risk assessment diagrams for deeper understanding of complex risk scenario's, allowing this information to be shared with all stakeholders in a clear, simple and therefore understandable way.

Specialized in event security, Jørgen Aass works on many of Norway's largest events like festivals, sporting events and official celebrations. He utilizes the bowtie method to understand the main drivers of the risk that accompany these events. By building bowtie diagrams, Jørgen Aass aims to get a deeper understanding of the risks, and in turn communicates this graphical presentation of the risks to all stakeholders.

Major events are enormous projects, but you do not need an Olympic game before complexity enters such a project. Even small events can seem like huge undertakings.

Jørgen Aass is a strong believer of simplicity, in all aspects of his work. The question he asks himself is: "How can I contribute to keep the project and my work as simple as possible?" According to Jørgen the challenge is to find the right balance between simplicity and complexity. He explains: "As Leonardo da Vinci said: Simplicity is the ultimate sophistication!".

To make order out of chaos, he recommends starting by dissecting the relevant event. Cutting the project up into comprehensible parts to get a better understanding. The parts that Jørgen Aass distinguishes: time parts (phases in the planning process or the event itself), physical parts (different areas in or outside the venue), organizational parts (different departments and functions).



## The role of risk in the event planning process

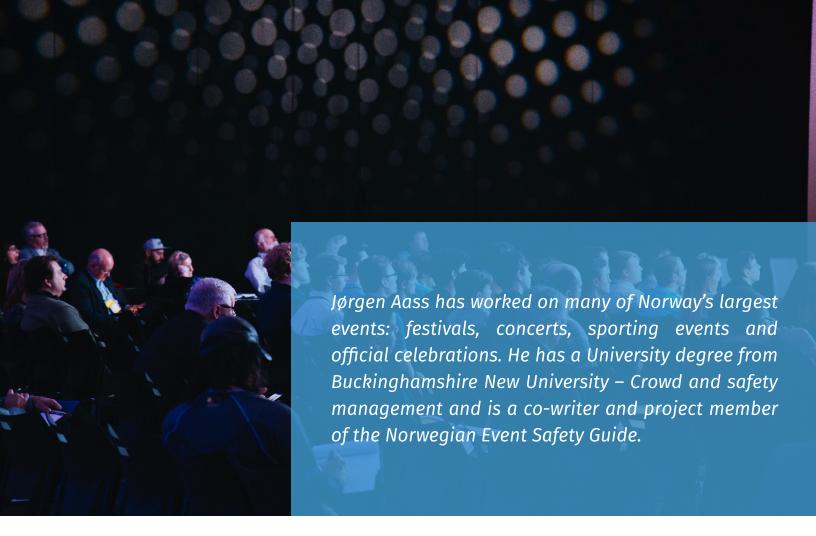
When taking a closer look at the time parts, Jørgen Aass uses the following phases in the planning process:

- 1. Learn
- 2. Plan
- 3. Prepare
- 4. Do
- 5. Review

"For me these five steps are a natural way to set focus and attention for my work." Jørgen Aass says. First he needs to LEARN (1) about the event, the spectators and other important aspects of the event, before he tries to understand and learn about the risks involved. When he starts to understand the risks, he will PLAN (2) to reduce the risk or to add value to the event. He explains further: "If I plan before I understand the risk, the planning will be based on assumptions and will be more of a shot in the dark, then a good, laser focused aim."

Many big events (like festivals and sporting happenings) are held once a year. Olympic games and other major gatherings are held every four years (with different event organizers). The main challenge with these events according to Jørgen is that more or less nothing is routine. There is no day to day operation over long periods of time, so there is no such thing as business as usual. That is why time and efforts are required to PREPARE (3) for the event. "After we have learned and planned, we need to turn the plans into practice. How can we ensure that everyone understands their job and role both in a normal situation and in case of a potential emergency? How can we give them enough information about the event to answer all kinds of questions that the spectators will ask?" These are the questions Jørgen Aass gives special focus in order to be successful.

Next, he explains: "We DO (4) the event, and we REVIEW (5) all aspects of our (learning, planning, preparing and doing) process to fully evaluate what we can do even better next time."



#### **Main drivers of risk**

"To understand the risks at an event, we need to understand what is driving these risks." According to Jørgen Aass you need to learn as much as you can about the organizers, the event, the spectators and others involved with the event. All are drivers of risk. Who are the organizers, how are they organized, what experience do they have as an organization, what expertise is in place and what are the budgets? Jørgen Aass claims that the most important factor for reducing risk, is a well-organized event with competence in the right place. "If the event organization is not well-established, even expertise will drown in the

chaos." Then you need to learn about the event itself, Jørgen asks a number of questions. What kind of event is it (concert, festival, football, seated, standing)? What is the purpose of the event? Where will it be held (green field, stadium, what is the infrastructure like, what is the transportation capacity to and from)? When will it be held (time of year, time of day, how many days, how many hours)? Will alcohol be served? Is there any experience with this or other similar events at this venue (any media coverage)? What are the attractions (bands, athletes, clubs)?

"If you do not understand your audience, you do not understand the risk! Plain and simple."

Jørgen Aass, CEO



Mr. Jørgen Aass is 43 years old and lives in Oslo, Norway. He has been working in event safety, security and crowd management since he started as a volunteer when he was 16 years old.

When you understand the event, you will start to realize what kind of spectators you deal with and how many are likely to show up at the event. What are the main demographics of the audience what is their motivation, their experience with such events and their likely behavior? Can you expect any special type of groups? Do you have spectators with special needs? What is the level of alcohol intoxication and is it likely the audience will use any drugs? Jørgen Aass indicates: "If you do not understand your audience, you do not understand the risk! Plain and simple."

## Deeper understanding through risk assessment

After you have identified the main drivers of risk, you can start to analyze the actual risk. Jørgen Aass separates the risk assessment into three main parts:

- 1. Find
- 2. Focus
- 3. Understand

Find: take the time to find as many hazards as possible, the more the merrier. Jørgen Aass advises: "Brainstorm alone, brainstorm with others. Quantity over quality. Look for hazards in the different parts you have dissected the event into: time, physical and organizational parts. Use different perspectives and look trough the eyes of different parties involved (spectators, artists, workers, etc.), Hopefully you will get a long list of potential hazards."



Focus: make sure the important does not vanish the quantity. Jørgen continues: "Risk assessment in my opinion should be a realistic approach to finding hazards and doing the relevant tasks to reduce risk. You cannot change the world in one day, so you need to select the most relevant hazards. What are you most worried about now?". How many hazards you should focus on depends on the capacity of your organization and the framework for risk assessment, but Jørgen recommends all departments and functional areas (from the board of directors down) to always have an up-to-date top 10 list of risks. "Risk should be a part of standard reporting in status meetings. Is your risk under control, are you concerned about something in particular, do you need help? Risks that are dealt with are put in maintenance mode (important not to forget, but not our main focus)."

Understand: "When you know what you are most worried about, you need to try to understand the risk." Jørgen Aass explains

that here it is about a balance between simplicity and complexity as well. "Risk assessment is not a buzz word evoking smiles on everybody's lips. Most people I work with will get a negative feeling when I ask them to do a risk assessment. That is why I approach most of my colleagues with a simplified assessment method. My hope is that it is so simple that they will not be scared away and actually do the risk assessment and keep it updated."

Jørgen presents 3 questions in a spreadsheet to people involved when conducting a risk assessment:

- 1. What do you fear can happen (top 10)?
- What can you do to prevent it from happening?
- 3. What can you do if it happens?

"You will not get a very deep understanding this way, but it is a first step and much better than nothing at all." Normally Jørgen goes more in-depth in his risk assessment, as expected from a risk professional. He continues: "I might choose a specific area of focus that needs a deeper understanding, for instance, terrorism related hazards, or if the risk is complicated or if it has severe impact, we can decide to go deeper into a risk that is already assessed in a simplified spreadsheet if the risk is complicated or if it has severe impact."

#### **Utilizing bowties and BowTieXP**

For deeper understanding Jørgen uses BowTieXP. He clarifies: "I like the bowtie method as it easily gives me greater understanding of the risk". What are the causes (threats) that can lead to the unwanted situation and what can the consequences be? What barriers can be put in place to stop the causes (threats) from leading to the loss of control and what barriers can you put in place to stop or reduce the consequences?

"I find that when I am using a graphical presentation of risk, people tend to read what I send. When I send along a spreadsheet or a long word document they seldom do." Jørgen Aass points out that bowtie diagrams allow for easy communication about responsibility. He likes that you can easily communicate who is

accountable for which barrier to create a common picture of responsibility. In his view this reduces the risk of misunderstanding, and the likelihood of barrier failure.

Jørgen Aass comments on an example bowtie diagram he shows: "This example is not a full assessment of the hazard, but simplified to show the concept. Each barrier has a color which represents the status of the barrier (Recommended/Approved/Approved implemented/Not approved). And the text barrier below the shows the same information as well as who is responsible for the barrier and the barrier effectiveness (good/unknown/poor)" (see image on next page for the example bowtie). "I do not use 3x3 and 5x5 risk matrices anymore", Jørgen Aass mentions the following reasons for this: you cannot know the likelihood if you don't have enough statistics. Consequences are better described with words instead of number categories.

Usually hazards can have multiple consequences and a matrix does not provide the insights to really understand the risks.



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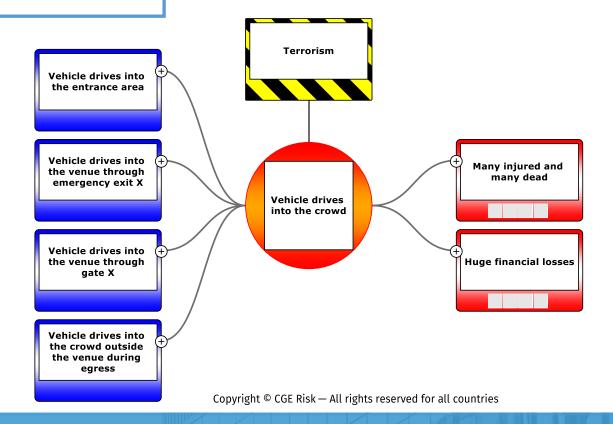
Jørgen Aass, CEO

#### **Software used:**



#### **Final thoughts**

According to Jørgen, asking the right questions is of major importance when assessing risk. 'Good questions will get better answers and a better understanding of the risks. Poor formulated questions will get poor answers and little understanding. One final advice from Jørgen Aass: "I do not like standalone words like 'Threat', 'Hazard' or 'Top Event'. I think they should be replaced or followed by a good question like 'Hazard — What do you see as a dangerous part of your work?' And 'Top Event — What do you fear happening?'".



### **CGE Risk**

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