

allocate costs against the risks. The way we do that is to look at the effect on the project cost of this risk actually coming to fruition – is it going to cost us £10,000 or £2 million? Then we evaluate the likelihood of that risk actually happening – is it 10%, 50%, or is it a really high risk? And based on that we try to work out a cost factor. It's a bit nebulous, but it's a way of coming up with a figure for project contingencies that the client can let you deal with, and of including something to cover the current envisaged risks. It's not just, "Well, let's keep 10% back." It's a figure set against a known list of risk items which are regularly updated. Some of the risks will go away and some new risks will come in. We continually evaluate that.

And the reason that you keep doing this process is to establish the project contingencies. You need to have, with the agreement of your client, a level of project contingencies. These should be identified early, they should be included in the applications to any Lottery funding or any public financing bodies, and they should be formalised and controlled. The important thing with project contingencies right through the project to completion, is they are not just adjusted as a knee-jerk reaction to an overspend. They are adjusted against the risk register. If you just adjust continuously because you have an overspend, you've already got a risk and it's a false economy. You have to adjust the contingencies in accordance with the risk register. In fact, I've actually been known to put the project contingencies up during the course of a project as more risks have been identified, before later we were able to bring them down. Overspends, if they're there, should be dealt with by the value-engineering process, rather than just taking a lump off the contingencies.

Ideally, try to involve the contractor in risk management post-contract. Sometimes we're loath to do this because the risks are identified in many minds as being the project manager's or the client's or the design team's responsibility, and one doesn't always want the contractor to be aware of these. But it is important to try and have the contractors involved in overall project risk management if at all possible.

I don't intend going into depth on the whole realm of cost control and pre-and post-contract reporting; I think that's part of another presentation. But it is important

that cost reports are regular – at least monthly, if not more regular than that – and that the design team buy into these. They should go through and make their comments on each element for which they are responsible.

Contractors should be selected in a similar way to the design team. Experience is necessary. You have to have people that know, that have real performing-arts experience. The problem of this, though, is that the actual nature of the industry, the arts industry, means we are working in specialist buildings, with specialist installations, often within heritage buildings requiring specialist skills such as for fibrous plaster, tiling, etc. But also there are often major restoration works involved. So you end up with three factors: you get major works that require specialist engineering, then restoration works, and then technical theatre contractors can do it. It is very difficult to have to consider contractor deal splitting the contract into elements of work, in a way such as using a specialist package

*There are significant risks in normal procedures carried out daily by most members of a design team or a venue management organisation - these are reviewed by a top construction lawyer. He is followed by a project manager who here sets out some of the risks in building projects, and by a client who is able to look back on a major project with some satisfaction, while pointing out the risks to which his team was exposed.*

You have to ensure adequate site-management control. This may appear quite obvious, but if you are not using a contractor who is knowledgeable in this area, there is a tendency to use a site engineer who they used on their previous project when in fact they need four, maybe five, maybe more. These points need to be allowed for in the pre-tender estimates and spelt out and addressed during the interviews before you select the contractor.

You must also consider the implications of contractors from abroad. The performing-arts industry uses a lot of specialised equipment and much may well be from non-UK contractors. If non-UK contractors are coming to work in this country we need to ask: Have they got the correct contract? Are they allowed to work over here? Do they have the sub-contract forms? How do we deal with VAT provisions? And an item which must not be dismissed; exchange rates. Most will tender in Euros now, but I've contractors tendering in their local currency and insisting on being paid in that currency. So should the client or the