# THE CHALLENGES OF THE 21<sup>ST</sup> CENTURY

By David T. Morgan

## 1. Introduction

Today I am speaking as President of the European Federation of Museum and Tourist Railways (FEDECRAIL). I have estimated that our member railways covering 23 countries throughout Europe carried in excess of 18 million passengers last year. For the most part, our passengers are travelling as part of a leisure activity. They do not have to take our trains. They do so because they wish to: it is – or it should be – a quality experience. They pay a fare well in excess of the fare normally charged on the public railway.

Many of my members' trains are operated by traditional methods and usually with steam. Such railways are labour intensive and, in most cases, are only viable because of the unpaid labour provided by volunteers. Yet none of our members receives a public subsidy, let alone depend on one.

Over the years, our lines have attracted an increasing number of passengers, in many cases providing a tourist attraction in their own right and bringing economic regeneration to the area they serve. For the most part, they are welcomed by environmentalists. No wonder we are the darling of nearly all the political parties. So what is the problem?

#### 2. The Threats:

# A. SAFETY

In the UK, we live increasingly in a risk-averse society; sadly "nanny state" is all too ready to pander to their demands by imposing regulations to protect the simplest "stumble bum" from tripping over a stone he is too lazy to lift his foot over. A few years ago, a safety officer visiting my neighbour's farm in Norfolk could find no fault until he came to my garden wall which was over 3 metres high and ran for some 120 metres. "You must paint that white", he declared pointing at my stone wall. "Why?" my neighbour asked. "Because people might walk into it" he replied. We pointed out that to the best of our knowledge no-one had done so for during the 604 years' life of the wall. In the end, we only succeeded in preventing this stupidity by pointing out that we were not allowed to because of other regulations applicable to listed buildings (for heritage reasons) of which the wall formed part.

Since the recent spate of high profile accidents in England, the tabloid press have whipped up the public into a frenzy of outrage leading to demands for totally unrealistic safety measures to be introduced. The fact that in the UK an average of ten people a day are killed on the roads is treated as irrelevant. "But, no" the public cry. "What price a life?" – and if a car leaves the road and lands on the railway, the railway should pay half the cost of prevention.

#### B. INSURANCE

Unfortunately, the world seems all too eager to gallop headlong over the cliff like the garadene swine to pursue the massive payouts handed down in the US courts. The result of these claims coupled with the loss of 12<sup>1</sup>/<sub>2</sub>% of the world's insurance reserves is that in some countries insurance cover has been withdrawn altogether, as in Australia. In others like Sweden, 50% increases in premiums have been seen. Last month, I learnt that one of my Scottish colleagues had been confronted with an increase in his premium for public liability insurance go up from £13,000 to £31,000 (approximately 20,000 euros to 46,500 euros).

# C. ENVIRONMENTAL IMPACT

A perennial problem for steam locomotives has been the fire risk caused by sparks, particularly in the case of coal-fired engines. In Britain, claims were capped from 1923 at £200 until 1977. Now adjoining landowners await with glee the passage of our trains and their claims are yet another burden which has to be met by our insurers.

Dark smoke and emissions of sulphur dioxide now have to be monitored. Train lavatories will soon, I suspect, have to be modified to prevent contamination of the track bed. The days of creosoted sleepers may be numbered. Naturally, our furry friends have some say in all this. Woe betide the railway which tries to move a badger set without proper authority. Recently, a railway was told that it could not rebuild a bridge which had been washed away during floors without consent because "rare" freshwater molluscs had been found in the river. This would not have been so bad if two neighbouring railways had not encountered the identical problem. How rare do you have to be?

# D. INCREASING COSTS

All these factors have contributed to a steep increase in costs, but there is a limit to what the market will bear, so we cannot merely put up the fares. In the United Kingdom, we have concentrated on keeping down other costs, like taxes and government-imposed charges. We have also developed other activities which boost our income, such as footplate courses, wine and dine, Thomas the Tank Engine and galas. Amazingly, few, if any, steam lines have closed in Europe, but only government intervention has saved several lines in Australia. During the last few months, I have had visits from railway operators around the world seeking ways how we might combine to move forward.

#### **3.** The Opportunities

#### A. PUBLIC RELATIONS

As an industry sector, straddling transport and tourism, we need to hone up our PR. We must sell ourselves to the media, the politicians and the public. We must broadcast our achievements. Rail is still by far the safest method of overland transport. We must alert our colleagues to the importance of containing claims brought by an increasingly litigious public. We have to persuade both governments and international agencies of the advantages of transporting large numbers of visitors by rail through sensitive areas, such as national parks and areas of special scientific interest. Lastly, it is becoming increasingly important to convince funding bodies of the value of our operations in the form of returns other than pure profit. Even bankers may see the upside of a project which unlocks the economy of an area or region.

#### B. COOPERATION

This brings me in many ways to the main point of my message: cooperation. I believe that by combing with our colleagues we can be more effective in getting over our message. After all, that is why I became involved in the Heritage Railway Association and helped to set up FEDECRAIL. The case for us cooperating is, I think, clear enough. Not many of us, if any, are in competition with each other. Whether we could or should do that on a global scale is something I wish to explore later in this conference. Of course, cooperation should not be restricted to our colleagues in the same line of business. We need to connect with other businesses in the same area; we should liaise closely with local government and planning authorities; we must consult with environmental agencies and national parks.

Furthermore, cooperation needs to be international, particularly with other railway operators. If we share problems, we should learn from each other, as I have found from my discussions with our friends from the southern hemisphere: water treatment for locomotive boilers from Argentina and risk limitation from Australia.

#### C. REGENERATION

In Europe, there have been several examples of old or disused railways being revived with an injection of cash so that its exploitation for tourist purposes can act as a tool to regenerate the area through which it runs. In Britain, the East Lancashire Railway was reopened as a local authority initiative and has been so successful that the line is now being extended. In France, the Baie de la Somme has been similarly reinvigorated by the reopening of a narrow-guage railway for tourist traffic and in East Germany, the "Mollibahn" to Bad Doberon benefited from the German Government's commitment to subsidise it for ten years. The railway succeeded in breaking even in the 6<sup>th</sup> year and now makes a profit – or so I am led to believe. The important factor, however, is that in each case the railway has brought new trade to the neighbourhood and turned round a declining area.

#### D. INNOVATION

Ing. Livio Dante Porta often said that if the Internal Combustion Engine had not been invented, the steam engine would have continued to develop and improve. When I saw him at the beginning of this year, he was full of enthusiasm for how he could improve on the efficiency of a 1930's steam car. On the railways, he developed a system of water treatment and boiler management which prolonged tub life and reduced costs, so he claimed, by up to 92%; he promoted the use of bio-mas as a cheap and efficient fuel: David Wardale produced "The Red Devil" and is now working on the 5AT: Roger Waller has designed a locomotive which is cheaper to run, cleaner to operate and more powerful then a diesel.

# E. ADAPTION AND THE FUTURE

"But what", you may ask, "has any of this to do with museum railways or the Stephensonian locomotive?" In my view, everything – economy, environment, reliability, safety. While David Wardale's proposal for building the 5AT has the glamour of speed and power, I believe there is a much more compelling case for a short haul workhorse. We – that is the museum railway operators – need to recognise that we are living on borrowed time – our locomotives are wearing out, and I don't just mean the boilers. On the West Somerset Railway in south-west England, we are rebuilding locomotive no. 88 of the old Somerset & Dorset Railway, S & D, or the Slow and Dirty, which enjoys a bit of cult following amongst British enthusiasts. So far we have spent over £250,000 (355,000 euros) and we expect to pay another £100,000 (142,000 euros).

Now, of course, we are buying ourselves some individuality with that locomotive and also a bit of history – but is it right that we should operate our daily service with such a star, particularly when you consider that the vast majority of our passengers have little interest in the historical or technical details of the engine hauling their train; they merely want it to be steam powered. There is a compelling argument that such locomotives should be operated only on high days and holidays, for galas and special events.

There is, however, a converse side to that argument: that to justify such expenditure, we need to make maximum use of the engine. After all, the lifespan of locomotive parts tends to be dictated more by time than by usage, and this is particularly true of heritage railways which tend to be short.

There are, however, other factors to take into consideration. The danger of fires caused by sparks may compel lines, particularly those in rural areas, to convert to oil fired locomotives, while the environmental concerns of an increasingly intolerant population may force train operators, particularly in urban areas, to replace traditionally fired locomotives with those of a more modern design burning cleaner fuel – or perhaps merely burning it more cleanly.

Finally, and probably the most persuasive argument; there is a shortage of steam locomotives out there. So the challenge I would like to leave operators to consider is that they need to consider how they can adapt to modern technology and embrace the advances – and the advantages – pioneered by engineers such as Dante Porta, David Wardale and Roger Waller. The one thing I would ask is that they should approach the issue with open minds. Too many engineers or shedmasters I have spoken to in Britain suffer from tunnel vision; I wish more of them could have the courage to experiment, try and test, like Shaun McMahon in Argentina.

It is, of course, also important for the providers of steam to recognise the demands of this market if they are to be called upon to meet it. One of these is the need to feed the expectations of the ultimate customer, i.e. the passenger, who probably wants to travel behind a steam locomotive which looks, sounds and smells like a traditional one. I will not attempt to identify the other demands as I believe these will be addressed by my friend and colleague, Heimo Echensperger. Suffice it to say, adaptation is not a one way ticket; the suppliers will have to adapt too.

## 4. Conclusion

I should probably have entitled this paper "Challenges of the 21<sup>st</sup> Century" There are plenty facing us. However, I have always been an optimist and have no doubt that, with the commitment of everyone here and our colleagues round the world, we can meet them successfully.

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