

# Heritage Railways on the Brink of Commercial Operation

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## History of Movement

The heritage railway movement in Germany (called 'museum railways' in German) started in the mid-1960s as a voluntary movement. The major aim at that time giving most societies their focus was to save railway rolling stock from the scrapyard. A few societies also set out to save entire rural railway lines, but heritage railways with their own track have always been a minority in Germany. The number of societies grew steadily over the years with some high spots in the mid-1970s—the end of the steam era in West Germany—and in the mid-1980s when German railways celebrated their 150th anniversary. The last growth period was after 1990 when traditional railway groups in eastern Germany became independent societies, responsible for their operation.

Table 1 German Heritage Railways and Initiatives

Total number of heritage railway initiatives	462
Operating heritage railways and museums	160
Industrial railways* (gauge <750 mm)	70–100
Other initiatives and museums	200+

Note: In this article, 'railway' means railways including standard and narrow-gauge lines down to a gauge of 750 mm as defined by German laws. Industrial railways have a gauge of less than 750 mm are not subject to these laws.

In addition to the volunteer groups who organized themselves formally into a railway society, there are many initiatives around the country dealing with railway heritage in the widest possible sense. A recent publication<sup>1</sup> listed 462 institutions dealing with rail-bound traffic and having at least some relation to the public. These institutions range from a single person preserving some railway artefacts to small groups preserving railway buildings or rolling stock and on to large groups

operating railways or tramways up to main-line express locos and several kilometers of owned track. In this diversity, the German scene is not much different from other European countries. The structure of the movement is summarized in Table 1.

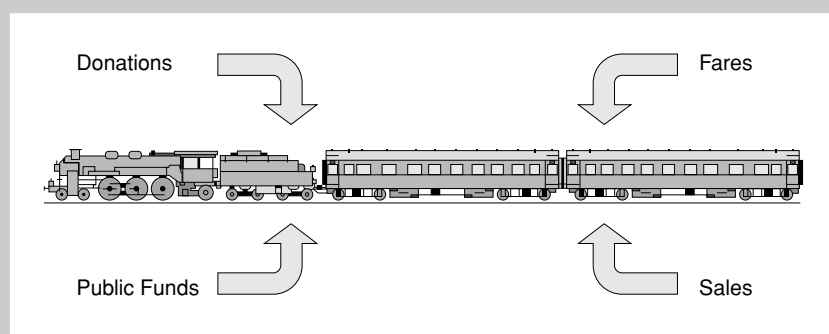
The operating heritage railways and museums group is the largest identifiable group with similar aims, which has the largest operations and perhaps also the largest number of individual supporters. This group is followed by industrial railways, which are normally relatively small operations with as few as one or two people but owning perhaps the largest number of rolling stock because they are cheaper to obtain and easier to store. There is little available data on the other initiatives and museums group, and it is not easily analyzed.

## Economic Situation

The German heritage railways had to be very much self-financing right from the first days because no significant public funds were available in the first 15–20 years. Financial resources were obtained through contributions from society members, sponsors, donations and largely from the public by running heritage train services, museums and side businesses such as refreshments and souvenirs. By necessity and despite being run by volunteers, these organizations have been organized like commercial



Even the busiest stations see steam operations. Germany's oldest operating express train locomotive, the Bavarian S 3/6 3673 of 1918 (later DR 18 478) is standing in Cologne Station ready to haul the *Rheingold* luxury train. The engine is operated by Bayerisches Eisenbahnmuseum e.V. (Author)

**Figure 1 Financial Resources of German Heritage Railways**

operations and even today, when there are more public funds, most income comes from fares and sales (Fig. 1).

The early heritage train operators experienced severe difficulties after 1977 when Deutsche Bundesbahn stopped operating steam locos and banned all steam from its tracks. This caused the loss of a significant source of income for heritage railways.

This situation lasted until 1985 when DB AG brought some steam engines back into operation to celebrate the 150th

anniversary of German railways but heritage steam engines were still banned until 1994 when the liberalized open-access system was implemented, allowing heritage operators access to tracks. Between 1977 and 1994, the only way a heritage railway could run a train was either on its own track or on the track of a private railway that would give track usage rights. Obviously such limited market access inhibited the development of heritage railways. But beyond having no access to DB track, a further

disadvantage was that most heritage railways are generally in rural areas with no direct access to the large potential customer base in metropolitan areas.

Before 1994, a railway company's operating licence was tied to ownership of the track, but the open-access legislation introduced the concept of licensing train operations independently from track ownership. The number of train operating licences is not bound to operation of a specific service except for a distinction between freight and passenger traffic. To obtain an operating licence, the applicant simply has to prove:

- Reliability, meaning no criminal record or other previous convictions
- Sufficient knowledge, meaning basic legal knowledge of railway operations and safety rules and standards
- Financial soundness, meaning that the envisaged operation is able to financially guarantee the required maintenance of the railway to allow safe operation

Obviously, almost any heritage railway with a few years of operational experience should be able to obtain a general operating licence on this basis and many did, resulting in a significant expansion of heritage train operations—steam, diesel, and electric—on the nation's rail network (Table 2).

Currently, about 50% of Verband Deutscher Museums-und Touristikbahnen (VDMT) member railways have a train operating licence. For comparison, the total number of train operators (passenger or freight) in Germany is about 280, of which about 56 are operating heritage or tourist train services.

Until now, the expansion of heritage railways was primarily in the industry's traditional market segment of vintage trains. But after the open-access liberalization, it soon became quite obvious that even an



Old steam on modern track. The Prussian G8 4981 Mainz from the Darmstadt-Kranichstein Railway Museum is awaiting departure clearance. (W. Lökel)

**Table 2 Economics of Heritage Railways in 1999**

Number of annual passengers	1.9 million
Total annual revenue	DM39 million
Average revenue per railway	DM500,000
Track in regular use	1,400 km
Operations	980,000 train-km
Operable locomotives/railcars	350
Operable carriages	970

DM1=US\$0.5

(VDMT)

historic engine can haul any train, which eventually happened.

Looking back on the self-financing of heritage railways, it is not surprising that finances were always tight. Now we have a situation where we have organizations—often run on a voluntarily basis—who know how to run trains and are allowed to do so. These organizations see themselves confronted with a market in which the decline of incumbent operators offers a lot of opportunities. Quite naturally, some heritage railways might decide to rise to the challenge although their core business so far has been in vintage services. The identifiable market opportunities for heritage railways are summarized below:

- Shunting services (relatively easy to enter)
- Track maintenance trains (relatively easy to enter)
- Freight trains (short lines, difficult over longer distances)
- Passenger services (most difficult to enter)

In other words, can heritage railways improve their finances by using their competence to offer commercial services and can they use such operations to contribute to the expensive task of preserving our industrial heritage?

The straightforward answer is yes. Most heritage railways have plenty of

operational rolling stock that could be used for shunting and track maintenance, which is available at no extra cost and stands idle during the week. Therefore, the costs and risks in entering one of these markets are quite low for a heritage railway. Consequently, some managements of heritage railways are looking at these commercial opportunities and some are providing limited commercial services of various types.



The DRG standard Class 64 419, operated today by DBK-Historische Bahn e.V., steams uphill towards Schäbisch Hall on the Heilbronn–Crailsheim line.

(Author)

But what are the implications for the volunteers who work for personal enjoyment and their interest in historic trains, and who are the volunteers?

## Social Background

The heritage railways depend and probably always will depend on volunteers. Even if there are more commercial activities, the work of restoring and operating historic railway stock can only be viable without extensive public funding by using volunteer manpower. In particular, the very labour-intensive nature of restoration and operation must depend on skilled volunteers, because employment of full-time paid staff could never be viable. To maintain a volunteer workforce in this context it has to be understood that the motivation of volunteers differs significantly from that of normal paid employees. While a paid employee is



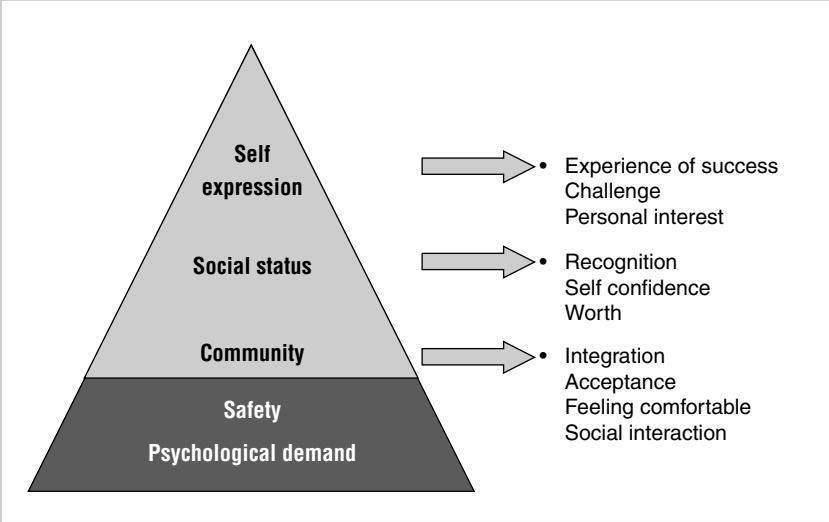


The Bavarian S 3/6 3673 loco hauling the *Rheingold* train near Rheinbrohl on the main line near the River Rhine.



(G. Profitlich)

Figure 2 Volunteers' Motivation



motivated by income, type of work, and social environment in choosing a job, volunteers are usually expressing other facets of their personalities through their volunteer leisure activities (Fig. 2).

From these motivations, it has to be concluded that altruism is not the only basis for volunteering; there may also be elements of ego, improvement of personality and social reputation. It is therefore not surprising that recent studies on volunteers show that perceived satisfaction is a key determinant of when and where people will volunteer. Determining factors are:

- No long-term commitment
- Fun
- Challenge of work in relation to ability
- Associated learning opportunities

Table 3 Structure of VDMT Human Resources (1999)

Total society members	15,000
Active members	5,400
Full-time employment	155
Part-time employment	51
Job-creation scheme	143

For heritage railways these results lead to the conclusion that they should be more successful in keeping their volunteers if they offer a kind of 'career path' that maintains the challenge and allows personal growth. But to recruit new volunteers it must be recognized that offering jobs cleaning coaches for some years may not give people what they are

looking for. The abilities and skills that heritage railways should demand from their volunteers must match the offered work. For the volunteer it should be a mixture of making use of present abilities and developing new ones. In an ideal situation, the amount a volunteer contributes is compensated by the satisfaction and learning he or she gets from it. Table 3 lists the human resources of VDMT-member heritage railways.

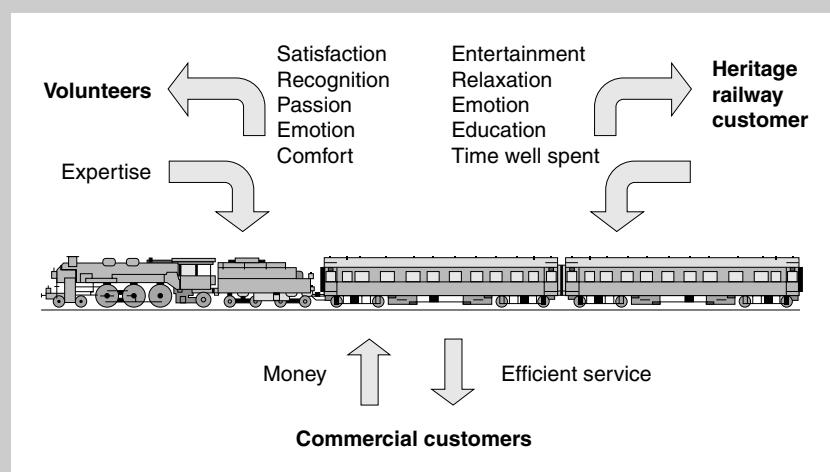
In this context, it is also important to look at the social demands a heritage railway must fulfil in relation to its volunteers and customers and what new elements commercial operation might bring. While volunteers are only willing to contribute time and expertise in exchange for personal development and well being, customers expect a nice day out and perhaps some learning for the kids or themselves. The latter expectations are mainly met by the nostalgic environment and action provided by rolling stock in combination with friendly staff and

catering facilities. Both volunteers and customers are linked emotionally by their intent to enjoy themselves. The framework is the train and its environment, which provides a common emotional base between both parties.



Steam engines are regular visitors again to main stations. This standard class tank engine 64 419 is awaiting departure in Stuttgart Station. (Author)

**Figure 3 The Heritage Railway Exchange**



By contrast, a commercial customer or passenger does not care about these things. Their requirements are cost effectiveness, efficiency, reliability and flexibility. The management expanding a heritage railway from its traditional market into a more commercial operation will face three different demands and resource flows. While the volunteers and passengers have mostly emotional demands, the commercial customer has no emotional relationship with the business (Fig. 3).

If the above thesis that keeping historic rolling stock operational depends on voluntary work is correct, the impact of the new demands of commercial operation has to be assessed in relation to volunteer staff.

In contrast to other volunteer organizations, heritage railways are perceived by their customers as a service organization that offers a nice day out. The focus for the volunteers is not on providing aid or other charitable support but is a two-way exchange of service for money. In this respect, the customer chooses and values the service in comparison to other leisure activities. The factual exchange between the

Figure 4 The Non-material Exchange

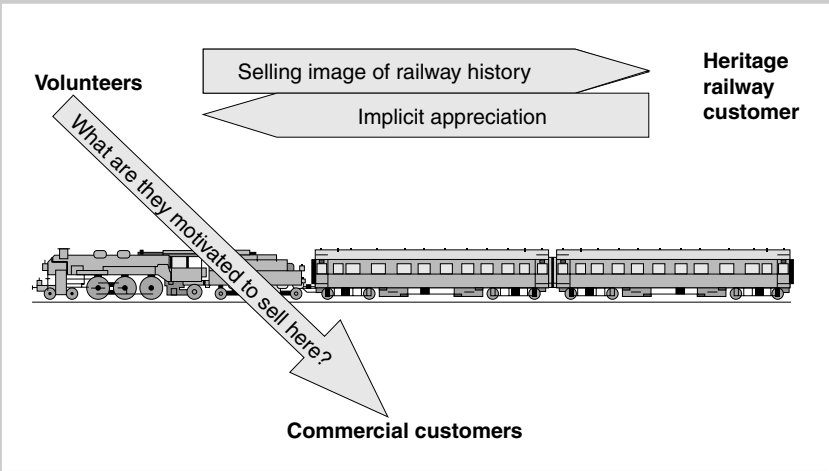


Table 4 Management Challenges

• Volunteers	• Commercial customers
Individual preferences	Reliable service
Challenge	Timely
Learning experience	Efficient
Recognition	Flexible
Fun	Value for money
No long-term commitment	
Private agenda	
Passion	

volunteer and the customer in this context is the same as any other service organization. So why does someone voluntarily do a task that is otherwise a normal job? It can be assumed that this is largely to do with appreciation. The volunteers offer their railway to the public and the customers appreciate it by coming. As everybody who is involved in managing a heritage railway knows, there is nothing much better than a day when you're overwhelmed by customers. While normal paid staff fear such events, volunteers are excited about so much appreciation. For the volunteer, the task

is seen not so much as a normal job but more as being part of the jobs needed to operate a (heritage) railway and therefore volunteers receive part of the appreciation shown by customers. The exchange between the volunteer and heritage-railway customer is described by the 'sale' of their image of railway history in exchange for appreciation of the volunteer work that this image is based on (Fig. 4). Clearly, this non-material exchange between the volunteer and customer is an essential element in the feedback that volunteers receive for their work and is what keeps them going.

When a heritage railway becomes involved in commercial operations, the question is what the volunteers will receive in exchange for their contribution. It can be rightly assumed that a commercial customer is just interested in an efficient and cost-effective service and is not buying any image of railway transport. On the other side, the motivation for volunteers to perform railway jobs without emotional feedback may not last long. Although a healthy bank account is important, it may not be enough to keep volunteers. The management has to address how a commercial operation can be linked with the volunteer movement to the advantage of both.

The Challenge

If management decides to offer commercial services based on the capabilities and resources of the heritage railway, it has to recognize that it will face the challenge of managing if not contradictory at least incompatible expectations. Table 4 lists the potential expectations of volunteers and commercial customers that management must arbitrate if it decides to provide commercial railway services. Obviously a modern volunteer has a clear understanding of what he or she expects to get from their unpaid work. Whatever the prime motives, perceived satisfaction keeps the volunteer going. In contrast, a commercial customer has different expectations centred on reliable cost-effective service with little room for emotional satisfaction. In this context, it has to be remembered that commercial operation may be considered not for the sake of the management challenge but to develop new sources of funding. Naturally, in this respect the management focus has to shift to the demands of commercial service and cannot stay

focused solely on the heritage operation. This offers the risk of potential conflict with the volunteers. Some possible causes of trouble are:

- Shift of resources (money, manpower) into non-heritage activity
- Shift of priorities to demands of commercial customers (at least at beginning)
- Acquisition of non-heritage vehicles for commercial use
- Use of heritage vehicles for commercial service
- Increasing demand for on-time routine tasks
- Lack of German cooperative tradition between volunteers and professionals on same level
- Most managers of heritage railways are volunteers

The challenge for management is to communicate and justify the necessary steps and decisions required to set up the commercial operation and to get them accepted by the volunteers. The above sources of potential conflict should be addressed early in the process and the volunteers, especially if they are directly involved with relevant rolling stock, must be able to participate in the decision and contribute to the solution. A particular problem in Germany is that there is no tradition of professional and volunteer staff working side-by-side, so we lack a developed consensus regarding mutual respect and cooperation. Even professionals and volunteers in the same sector usually work in separate organizations and where they do work together, their responsibilities and tasks are deliberately different. There is no peer-level mutual recognition. This may be another management issue to address. The rewards for mastering the challenges and setting up a successful commercial operation within or aside a heritage railway could be a new steady source of funds for heritage activities. Beyond that,



Modern station with old steam. Large crowds gather when impressive engines like the Class 01.5 and 50 0072 appear in Müldorf/Oberbayern. (H. Graf)

there are opportunities to complement the necessities of both worlds for the best. For example, volunteer workers could help to minimize the number of staff if they come on weekends and holidays. While on the other side, the commercial workshop might also work on the heritage trains. Sales and clerical staff could be used for both sides if the priorities are set correctly.

Unfortunately, no heritage railway has yet to set up a commercial operation as described above. What we have seen in Germany so far are spin offs from heritage railways where former heritage railway staff start their own railway business, taking on the risks and rewards for

themselves. It is still to be seen whether the challenges such an endeavour would bring can be managed. However, it will be a lost opportunity if heritage railways never tap this potential source of funds. ■

This article was first presented at the international conference 'Slow Train Coming: Heritage Railways in the 21st Century,' held in York in September 2001.

### Further Reading

1. L. Kenning, *Bahn-Nostalgie Deutschland 2000* (Rail Nostalgia in Germany 2000), Verlag Kenning, 2000.



### Heimo Echensperger

Mr Echensperger founded VDMT in 1993 and is its first Chairman. He became Vice President of FEDECRAIL in 1994. He holds degrees in engineering and has some 17 years experience in managing volunteer heritage railways.