



European Federation
of Museum & Tourist Railways

Fédération Européenne des Chemins de Fer Touristiques et Historiques

Europäische Föderation der Museums- und Touristikbahnen

International Heritage Railway Conference

Salzburg, Austria

18-19/04/2008

Conference Proceedings



Conference 2008

Salzburg, Austria

Published by:

FEDECRAIL – European Federation of Museum and Tourist Railways

de Akker 25

7481 GA Haaksbergen

Netherlands

<http://www.fedecrail.org>

contact@fedecrail.org

Text © individual Authors as identified 2008

This format © FEDECRAIL – European Federation of Museum and Tourist Railways 2008

This document was produced on behalf of the European Federation of Museum and Tourist Railways by

John Fuller, Editor

Heimo Echensperger, Layout

Content

- ◆ **Gunter Mackinger** – Salzburger Lokalbahn
- ◆ **Rienko Wilton** – Europa Nostra
- ◆ **Rainer Balzer** – European Railway Planer
- ◆ **Eduard Erhart** – Full Steam to the Präbichl – Erzbergbahn Project
- ◆ **Chris Le Marschall** – The Australia Experience
- ◆ **Dr Reinhard Serchinger** – Steam Locomotive Emissions
- ◆ **Angelika Gasteiner** – Project BahnAchse

**Salzburger
Lokalbahn** **SLB**

StadtBus
SAUBER. LEISE. OBUS.

Salzburg AG



Salzburger LokalBahn, StadtBus, WolfgangseeSchifffahrt & SchafbergBahn



Gunter Mackinger
Direktor Salzburger LokalBahn
Geschäftsführer SKGB



■ Strom Gas Fernwärme Wasser Verkehr Telekommunikation Kabel-TV Internet



Salzburg AG – Geschäftsfeld Verkehr

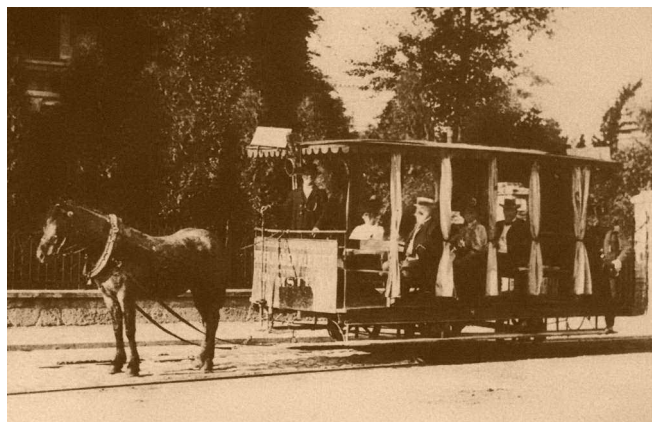
- Größter Mobilitäts-Anbieter in Salzburg (Stadt & Land)
- bis zu 160.000 Kundenkontakte täglich
- Personenbeförderung und Güterverkehr
- Partner der Wirtschaft
- Hohe Qualifikation der über ...
- 500 Mitarbeiter/innen





Salzburger Lokalbahn: Vergangenheit

1886 Hauptbahnhof - Zentrum - St. Leonhard, 1907 Berchtesgaden
1892 Zentrum - Parsch, 1893 Standseilbahn Festung Hohensalzburg
1896 Hauptbahnhof - Oberndorf - Lamprechtshausen
1938 Abbau Berchtesgaden - St. Leonhard
1940 Gründung Obus
1953 Einstellung der Südlinien St. Leonhard / Parsch



■ "Der Bereich Verkehr" von G. Mackinger

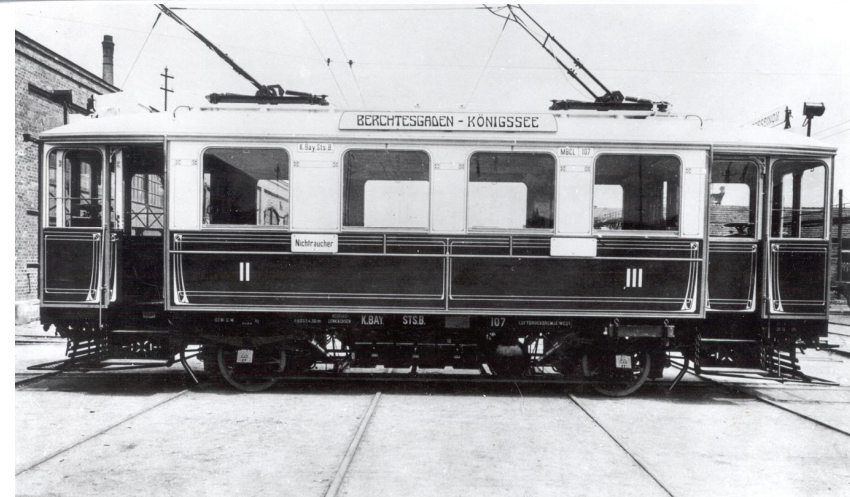
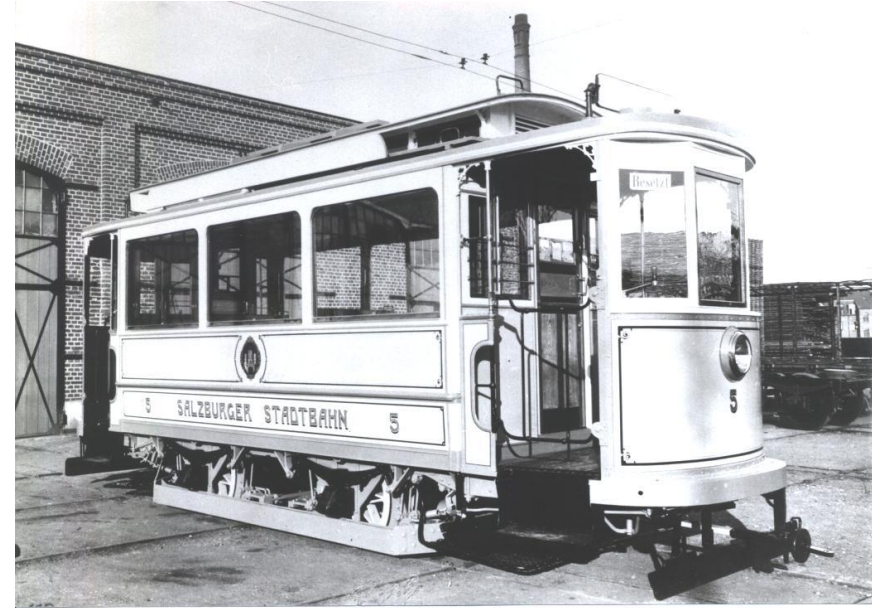
VE

3

**Salzburger
Lokalbahn** **SLB**

StadtBus
SAUBER. LEISE. OBUS.

Salzburg AG



■ "Der Bereich Verkehr" von G. Mackinger

VE

4



Salzburger Lokalbahn. Gegenwart

- Nahverkehr /S-Bahn, täglich 12.000 Fahrgäste
- erfolgreich – beliebt – kundenorientiert
- 18 moderne Triebwagen – mit Schaffner
- wachsender Güterverkehr



Die Verbindungen



**Salzburger
Lokalbahn** **SLB**

StadtBus
SAUBER. LEISE. OBUS.

Salzburg AG



Foto: Christian OSTERER



Salzburger Lokalbahn: Zukunft

- Verlängerung in die Altstadt Salzburg
- Ausbau im Norden (ca. 3 KM)
- Erweiterung Geschäftsfeld: z.B. Pinzgauer Lokalbahn
- Berchtesgadner LandBahn



**Salzburger
Lokalbahn** **SLB**

StadtBus
SAUBER. LEISE. OBUS.

Salzburg AG

OBus-Hauptstadt Europas



Historie

- 1940: erster O-Bus in Salzburg,
- 1941 – 1961: ständige Erweiterung der Infrastruktur,
- 1961: erster Gelenk-O-Bus,
- 1978 – 1986: Erweiterung des Netzes um drei weitere O-Buslinien,
- 2003: Übernahme O-Bus und Stadtbuss durch Salzburger Lokalbahn,
- 2003 – 2008: Erweiterungen und Netzoptimierungen,
- 2005: Autobusbetrieb Beteiligung an ALBUS



Warum OBus?

- Leise
- Keine Abgase
- Positive Einstellung der Fahrgäste, dadurch eine hohe Akzeptanz
- Modern
- Schienenbonus
- externe Kosten
- verbesserte Ertragslage
- Akzeptanz bei der Politik



Obus - Nostalgie

- Henschel Ürdingen 123 (Bj. 1957)
- Solo-Obus Steyr 109 (Bj. 1989)
- Gelenk-Obus 178 (Bj. 1985)



Festungsbahn & Mönchsbergaufzug

Festungsbahn

- seit 1892 Bahn zur Festung Hohensalzburg
- 1,7 Mill. Fahrgäste / Jahr.

MönchsbergAufzug

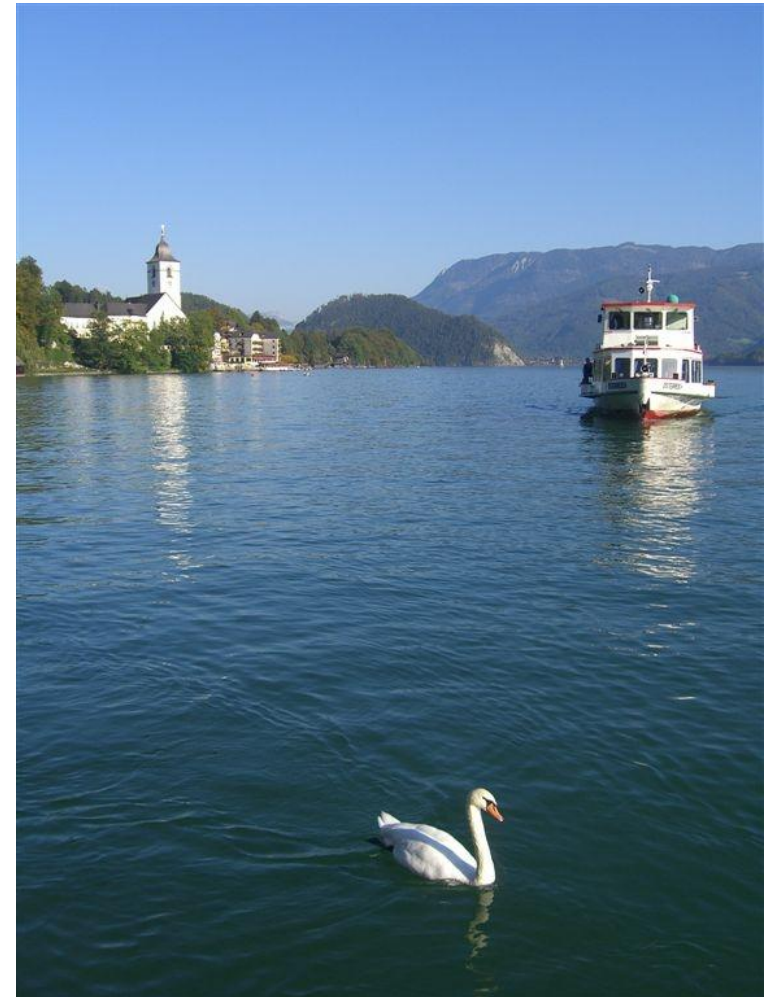
- Zubringer zum Museum der Moderne
- Drei Kabinen im Berg





WolfgangssseeSchifffahrt

- 2006 Kauf durch Salzburg AG
- Kapazität: 1.315 Personen
- 7 Anlegestellen
- über 400.000 Fahrgäste/Jahr





135 Jahre Schifffahrt

- Restaurierung Dampfschiff Kaiser Franz Josef
- touristische Programme, Packages, Veranstaltungen
- intensives Marketing
- über 250 Sonderfahrten im Jahr



SchafbergBahn



- Seit 1893 in Betrieb
- Fahrzeit: 45 min
- Strecke: 5,85 km
- Höhenunterschied: 1.190m
- max. Steigung: 26%

- 5 nostalgische, 2 neue Dampf – Lokomotiven
- 2 Dieseltriebwagen
- 9 Personen und 3 Güterwagen

115 Jahre SchafbergBahn

- Steilste Dampf - Zahnradbahn Österreichs
- Touristischer Leitbetrieb für die Region
- Restaurierung „Kaiserwagen“





Vielen Dank für Ihre Aufmerksamkeit !





EUROPA NOSTRA is:

- A pan-European movement for cultural heritage
- The voice of Europe's civil society committed to cultural heritage



Member Organisations include:



Membership:

- 250 Member Organisations
- 210 Associate Organisations
- 1500 Individual members
- in 53 countries, of which 45 in Europe

EUROPA NOSTRA is supported by:

European Organisations:



Private Foundations:



Corporate partners:



Main Activities:

- Influencing Policy

Main Activities:

- Influencing Policy
- Campaigning for Endangered Heritage

Main Activities:

- Influencing Policy
- Campaigning for Endangered Heritage
- Exchanging Ideas and Experiences

Main Activities:

- Influencing Policy
- Campaigning for Endangered Heritage
- Exchanging Ideas and Experiences

Main Activities:

- Influencing Policy
- Campaigning for Endangered Heritage
- Exchanging Ideas and Experiences
- Raising Awareness

Main Activities:

- Influencing Policy
- Campaigning for Endangered Heritage
- Exchanging Ideas and Experiences
- Raising Awareness
- Recognising Outstanding Heritage Achievements

Influencing Policy:



Influencing Policy - Key Partners:



The COUNCIL OF EUROPE



The EUROPEAN UNION



UNESCO

Influencing Policy - Key Partners:



The COUNCIL OF EUROPE



Influencing Policy - Key Partners:



The EUROPEAN UNION



Influencing Policy - Key Partners:



UNESCO



Influencing Policy:



Influencing Policy:

Impact of Wind Turbines on Europe's Landscapes



Influencing Policy:

Cultural Tourism: its Encouragement and Control



Influencing Policy:

The Challenges of Safeguarding Europe's Coastal and Maritime Heritage



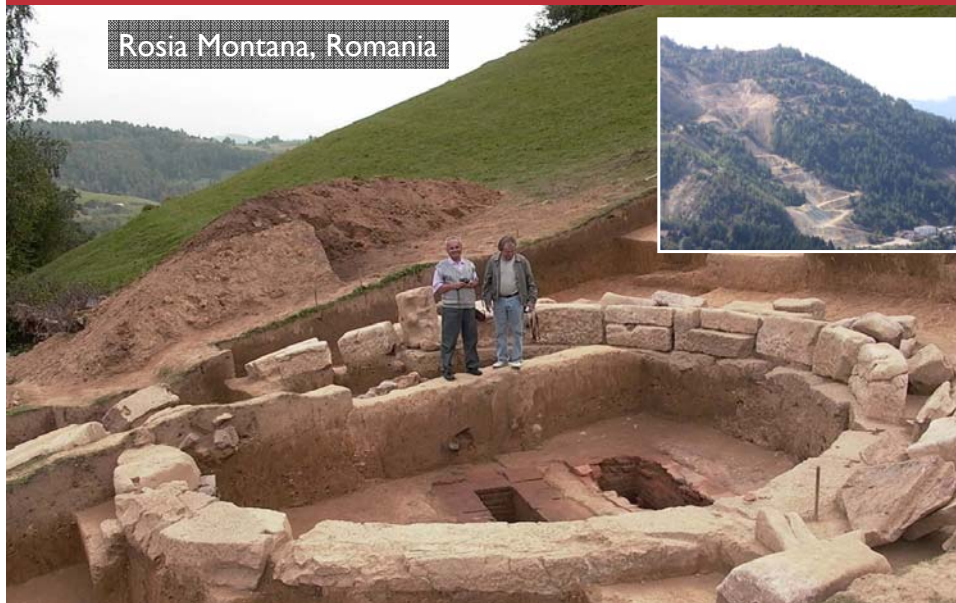
Campaigning for Endangered Heritage:

The Roman Baths at Allianoi, Turkey



Campaigning for Endangered Heritage:

Rosia Montana, Romania



Campaigning for Endangered Heritage:

The Historic City of Saint Petersburg, Russia



Campaigning for Endangered Heritage:

Old Bridge in Mostar



Campaigning for Endangered Heritage:

Kosovo



Campaigning for Endangered Heritage:

Cyprus



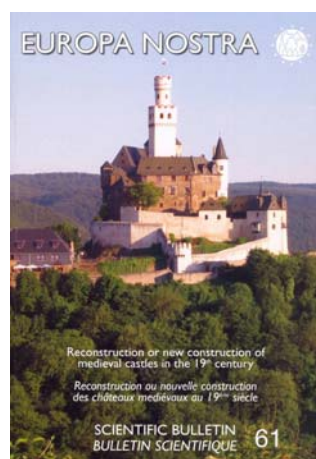
Exchanging ideas and experiences:

Forum: European Engineering Heritage
Newcastle, 13 June 2008



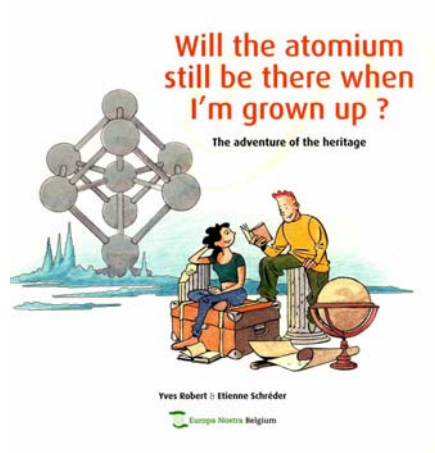
Raising Awareness:

Publications

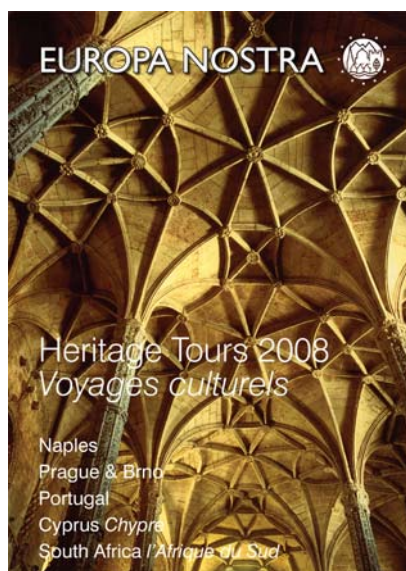


Raising Awareness:

Publications



Raising Awareness: Heritage Tours



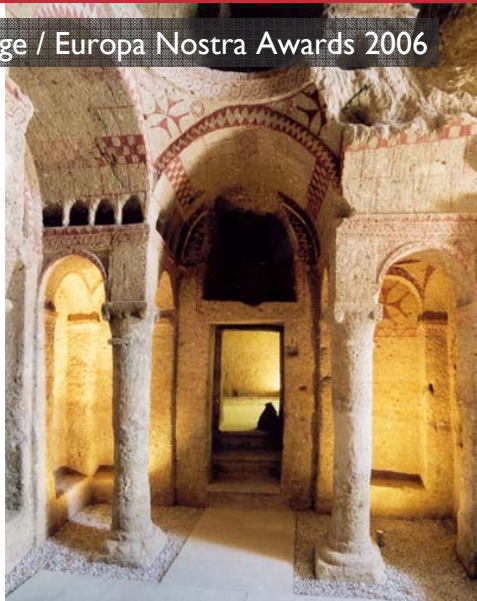
Recognising Outstanding Heritage Achievements:



Recognising Outstanding Heritage Achievements:

EU Prize for Cultural Heritage / Europa Nostra Awards 2006

conservation
Sarica Church
Cappadocia
Turkey



Recognising Outstanding Heritage Achievements:

EU Prize for Cultural Heritage / Europa Nostra Awards 2006

conservation
Santo Stefano
di Sessanio
Italy



Recognising Outstanding Heritage Achievements:

EU Prize for Cultural Heritage / Europa Nostra Awards 2006

conservation
Farbdiaarchiv
Munich
Germany



Recognising Outstanding Heritage Achievements:

EU Prize for Cultural Heritage / Europa Nostra Awards 2006

dedicated service
Mihai Eminescu Trust
Romania



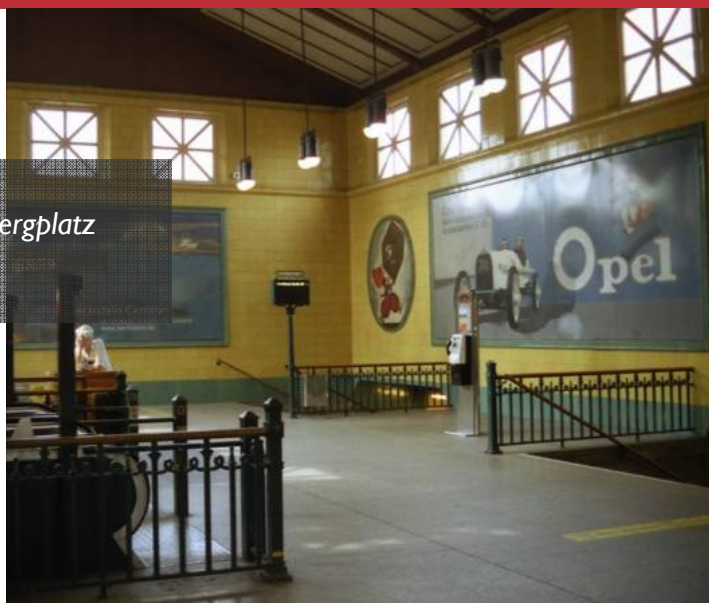
Recognising Outstanding Heritage Achievements:

1990
Vorortelinie
Vienna
Austria



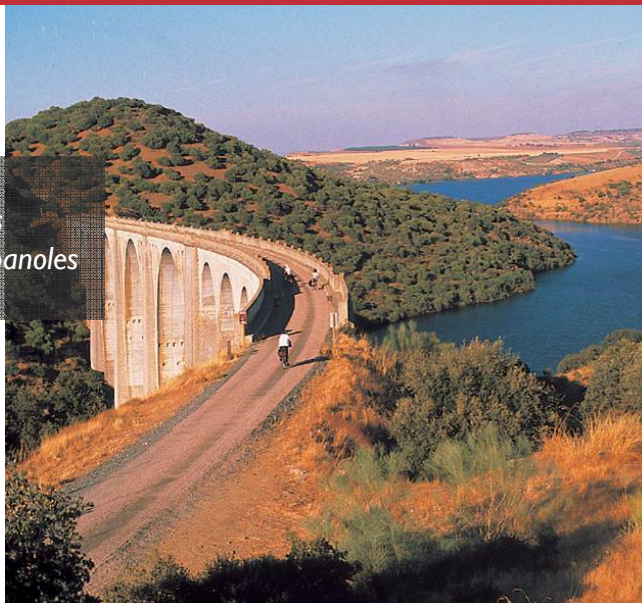
Recognising Outstanding Heritage Achievements:

1988
U Wittenbergplatz
Berlin
Germany



Recognising Outstanding Heritage Achievements:

2004
*Fundación de los
Ferrocarriles Espanoles*
Spain



www.europanostra.org



(slide) Europa Nostra: a short introduction
Salzburg, April 2008

(slide) Europa Nostra, the pan-European federation for cultural heritage, was born back in 1963, upon the initiative of Italia Nostra, as a response to the serious threat to the survival of Venice caused by the regular floods in the city.

(slide) 45 years later, Europa Nostra has become the leading European non-governmental organisation which brings together representatives of the ever-growing European movement for the safeguard of cultural heritage, built and natural, immovable and movable, tangible and intangible.

(slide) As an umbrella network of heritage organisations - big and small, associations and foundations acting at local, regional, national or European level - we have today become the voice of Europe's organised civil society committed to cultural heritage. Our main mission is to communicate their concerns about various threats and challenges to cultural heritage and to be the advocate of the multiple benefits which cultural heritage has for our society towards the public opinion and towards policy and decision-makers at European and national level.

(slide) Our network is composed of 250 member organisations, 210 associate organisations and about 1500 individual members from 53 countries, of which 45 in Europe. One can indeed say that Europa Nostra is an extremely rich organisation. Not so much in terms of money but certainly in terms of people who form our network. It is thanks to the commitment and enthusiasm of an ever-increasing number of dedicated volunteers, combined with the work of a small Secretariat based in The Hague in The Netherlands, that we can achieve so much with limited financial resources. The power of our network comes from a shared passion for cultural heritage, and the readiness of our members to invest their time, expertise, connections and often money for the pursuit of our goals.

(slide) The European Commission's Directorate General Education and Culture and the Council of Europe believe in the importance of our work and support it also financially. So do private foundations, such as the Leventis Foundation from Cyprus, and private companies, such as VOLVO, KBL Group European Private Bankers and the Coca-Cola Hellenic Bottling Company. We are confident that many more supporters and partners will help us match our resources with our ambitions.

(slide) The various pillars of Europa Nostra activity are:
influencing policy,

(slide) campaigning for endangered heritage,

(slide) exchanging ideas and experiences,

(slide) raising public awareness through its publications, website and other publicity means, and

(slide) recognising outstanding heritage achievements.

(slide) Acting as a true "European cultural heritage lobby", Europa Nostra advocates the need to take cultural heritage concerns into consideration when formulating and implementing all European and national policies which have an impact on heritage. We also seek to highlight the importance and specific character of cultural heritage within the wider cultural and policy agenda of our important international partners: namely the Council of Europe, the European Union and UNESCO.

(slide)

- The Council of Europe has had a pioneering role and has booked far-reaching achievements in the European intergovernmental cooperation and European standard-setting in the field of cultural heritage. Because of its pan-European geographic scope, including Russia and Turkey, the Council of Europe has always advocated that the European cultural space cannot be reduced to the present-day political frontiers of the European Union. From the very early days of its existence, Europa Nostra has developed a constructive and fruitful dialogue with the Council of Europe as was confirmed during our 40th anniversary congress held in Strasbourg in 2003.

(slide)

- Since the Maastricht Treaty, adopted in 1992, when the European Union introduced a limited but relevant competence in the field of culture and cultural heritage, Europa Nostra has invested considerable efforts in advocating the need for the Union to place cultural heritage concerns higher up on its policy agenda. Following a successful Forum which took place in December 2005, Europa Nostra now intends to organise another European Cultural Heritage Forum in 2009 with the aim to assess progress achieved and to identify new challenges and formulate new recommendations. Also, Europa Nostra was asked by the European Commission to react to the Green Paper towards a future Maritime Policy for the European Union. In our response we emphasised the role of coastal cultural heritage.

(slide)

- UNESCO, is the guardian of Cultural Heritage which has been designated as "World Heritage" or "Heritage of the Humanity", and is the champion of the necessity to preserve cultural diversity, alongside biodiversity, in the increasingly globalised world. It is a new challenge for Europa Nostra and its members, to take an active part in this world-wide reflection and mobilisation for the safeguard of cultural heritage and cultural diversity of the entire Globe.

Influencing policy

Europa Nostra has been dealing recently with a series of specific policy issues:

(slide)

- cultural heritage and education in a European perspective;

(slide)

- impact of wind turbines on Europe's cultural landscapes;

(slide)

- striking the right balance between the encouragement of cultural tourism and the conservation of the cultural heritage; and most recently,

(slide)

- the challenges of safeguarding Europe's coastal and maritime heritage, with the adoption in June in Stockholm, of a position

paper with a series of recommendations for inclusion in any future European maritime policy.

(slide) Campaigning for heritage at risk

Cultural heritage faces today numerous risks caused by various forms of uncontrolled development and many civil society organisations wage public campaigns for the safeguard of endangered heritage. Europa Nostra is increasingly solicited to lend its support to those campaigns. In the last 40 years we have thus intervened in numerous cases throughout Europe. One of our current campaigns concerns the safeguard of the Roman Baths in Allianoi in Turkey, which are threatened by the construction of an irrigation dam.

(slide) Another campaign concerns the threat to a large area of Rosia Montana caused by the proposed large-scale gold-mining project.

(slide) Let me mention also the increasing threat to Europe's historic cities caused by the proliferation of high-rise buildings in Europe. The proposed 400 meter high Gazprom tower in the vicinity of the historic centre of Saint-Petersburg is one of the most striking examples of this type of threat.

(slide) In the last decade, Europe's cultural heritage in Europe also suffered from armed conflicts, especially in the countries of former Yugoslavia. Today in all those areas, there is a need for European and international support to help the local communities in the process of reconciliation and building of peace, also through cultural heritage.

(slide) Civil society organisations can play a special role in this context as was demonstrated by the exemplary action of a Swedish NGO "Cultural Heritage without Borders", or by Europa Nostra's contribution to confidence building and promoting dialogue between Serbs and Kosovo Albanians concerned with cultural heritage protection in Kosovo. Europa Nostra went on exploratory meetings in Kosovo in past years which laid the groundwork for a preparatory weekend immediately preceding its successful forum, 'Cultural Heritage in Kosovo: "From Apple of Discord to Ferment of Reconciliation"', organised in Paris in November 2006.

(slide) Europa Nostra also intends to organise in the coming months a new mission to Cyprus where cultural heritage was also a deliberate victim of destructions and where there is an urgent need for promoting dialogue between Greek Cypriot and Turkish Cypriot experts and NGOs concerned with cultural heritage.

(slide) **Exchanging ideas and experiences**

Every year during its annual congresses, Europa Nostra organises forums on different heritage subjects of relevance for the whole of Europe, and also smaller-scale regional meetings with heritage NGOs in various parts of Europe. On those occasions, Europa Nostra's varied membership, from local organisations to European umbrella organisations such as Fedecrail and European Maritime Heritage proves extremely valuable.

The latest 'Forum on Modernist Cultural Heritage as part of Europe's cultural heritage', was organised in cooperation with DOCOMOMO International and the Swedish association of architects, and took place in Stockholm in June 2007.

In 2008, as part of Europa Nostra's annual congress taking place in NewcastleGateshead, our Forum discussion will be dedicated to the challenges of safeguarding Europe's Engineering Heritage, a subject that will undoubtedly be of interest to you all.

Europa Nostra has a Scientific Council and various working groups (currently groups exist for European Policy, Central and Eastern Europe, and Landscapes) where experts in the field can discuss issues and exchange views in a focused manner.

Europa Nostra is also regularly invited to participate and speak at conferences on heritage and related matters, as well as is represented at numerous heritage trade and art fairs across Europe (Salon du Patrimoine, Exponatec, TEFAF).

Raising awareness

Raising awareness is essentially what all the work of Europa Nostra is about: raising awareness about the richness of Europe's cultural heritage and how it needs safeguarding and how it can play an ever more important role in our lives.

(slide) Europa Nostra produces publications for its members and other interested partners. Each year, a number of European Cultural Heritage Reviews are published including the annual issue dedicated to the Laureates of the European Union Prize for Cultural Heritage / Europa Nostra Awards, and Reviews containing specific dossiers such as the latest one on 'The Saint Petersburg Phenomenon', or the 2006 special issue on Industrial Heritage, with a contribution by your John Fuller and David Morgan. The next edition will focus on Intercultural Europe, timed to coincide with 2008, European Year of Intercultural Dialogue.

The yearly Scientific Bulletin is a compendium of the proceedings from the Europa Nostra's Scientific Council meetings on the subject of ancient structures and fortified buildings, castles and dwellings with a historical character, or their ruins, and their associated gardens and parks.

(slide) Three editions have been published of the book, "Power of Example" (with a total distribution of 27.000 copies) which became a wonderful visibility tool for Europa Nostra's mission and action. Europa Nostra also disseminates information to its members and interested parties via its website, newsletters and regular communications.

(slide) Europa Nostra organises a Heritage Tours Programme every year for individual members, visiting cultural heritage sites, cities and regions in Europe and beyond. Europa Nostra encourages the spread of responsible and sustainable cultural tourism.

(slide) Recognising outstanding heritage achievements
Europa Nostra's Award scheme, our 30 year old flagship activity, has been carried out for the last 6 years in a fruitful partnership with the

European Commission under the title of the European Union Prize for Cultural Heritage / Europa Nostra Awards. Six monetary awards of €10.000 each were introduced for the top Prizes in the various categories. The awards recognise outstanding exemplary restorations and initiatives of the many facets of Europe's rich cultural heritage, ranging from the restoration of buildings and sites, their adaptation to new uses, new buildings in conservation areas, urban and rural landscape rehabilitation, to archaeological sites, care for collections, research and dedicated service to heritage conservation.

The award scheme attracts up to 200 dossiers in six categories per year, with on average, 30 laureates recognised for their outstanding qualities.

(slide) Last year, Prize winners included the conservation of *Sarica Cave Church* in Cappadocia in Turkey,

(slide) the conservation and redevelopment of the abandoned village of *Santo Stefano di Sessanio* in Italy and

(slide) the conservation and making public of the colour slide archive from the period 1943-1945 at the *Zentralinstitut für Kunstgeschichte* in Munich in Germany.

(slide) Also awarded are individuals and groups that dedicate themselves to the safeguard of cultural heritage. Last year, the Prize winner was the *Mihai Eminescu Trust*, active in Transylvania in Romania.

(slide) In the past, projects that might be of special interest to you present here today have regularly been awarded. Rail related winners included the redevelopment of the Vienna *Vorortelinie* in 1990,

(slide) the restoration of the *Wittenbergplatz* underground station in Berlin in 1988 and

(slide) the rehabilitation and redevelopment for non-motorised transport of derelict railways by the *Fundación de los Ferrocarriles Españoles* in Spain in 2004.

A prestigious yearly European Heritage Awards Ceremony and local Award Ceremonies for each Laureate provide publicity for the exemplary work being done across Europe to protect and enhance the continents rich cultural heritage. The ceremony for the 2008 EU Prize

for Cultural Heritage / Europa Nostra Awards will take place in Durham Cathedral in the United Kingdom in June this year.

(slide) In conclusion

Europe's cultural heritage is an extraordinary but non-renewable source of wealth, both spiritual and material, for each and every citizen and for our society as a whole. Heritage is indeed fragile and is exposed today, just as much as in the past, to many threats. Cultural Heritage therefore needs "defenders" and "advocates". We need to preserve the memory of the creative genius of the previous generations which has made Europe as beautiful and as diverse as it is today. If protected, Europe's cultural heritage can continue to exert its positive influence on the designers and builders of today's living environments and tomorrow's cultural treasures, and also continue to be a rich source of enrichment and enchantment in our lives, and indeed be an essential component of the quality of life and living environment and of the identity for present and future generations of Europeans.

Only together can we make a difference

comfortable and easy worldwide marketing for railway and tramway attractions

Rainer Balzer
Germany

**Es gibt viele gute und attraktive
Eisenbahnmuseen und
Museumsbahnen in ganz Europa**

**- aber viele werden nicht
gefunden**

Wieso ?

- Versuchen Sie mal, in einem unbekannten Gebiet und ohne Vorkenntnisse, z.B. im Urlaub, eine dieser Attraktionen zu finden
- -> Dazu gehört ziemlich viel Glück!

fedecrail 18.04.2008

www.railway-planner.net

3

Dafür gibt es verschiedene Gründe:

- Wer nicht aus der Szene kommt, hat keine oder nur zufällig eine Adresse
- Wer zufällig auf eine Bahn trifft, muß Glück haben das dort gerade geöffnet oder Betriebstag ist
- Fehlende Sprachkenntnisse bei Besuchen im Ausland

fedecrail 18.04.2008

www.railway-planner.net

4

Beispiele

- www.eisenbahn-termine.de
- <http://ukhrail.uel.ac.uk/events.html>
- wer pflegt diese Termine?
- wie werden diese übermittelt?

fedecrail 18.04.2008

www.railway-planner.net

5

Was sind die Ursachen

- Jeder Veranstalter versucht sein Bestes, (oft nebenbei, da die Hauptarbeiten schon alle Kräfte beanspruchen)
- Fehlendes kooperatives Marketing

fedecrail 18.04.2008

www.railway-planner.net

6

Wie sind die meisten Informationen aufgebaut?

- zu kompliziert
- zu umständlich
- nur für diejenigen, die der jeweiligen Sprache kundig sind
- ...

fedecrail 18.04.2008

www.railway-planner.net

7

Was wir brauchen:

- einfache und schnelle Übersicht, direkte Information!
- für jeden Interessenten auffindbar!
- Suchmöglichkeiten! (Filter)
- ...

fedecrail 18.04.2008

www.railway-planner.net

8

Eine Adresse für alle!

- der Eisenbahn-Planer
oder railway-planner

www.railway-planner.net



fedecrail 18.04.2008

www.railway-planner.net

9

Der „Eisenbahn-Planer“ oder „railway-planner“

- Veranstaltungen werden sofort und immer aktuell angezeigt
- Nutzung modernster Technologien
- von Eisenbahnfreunden für Eisenbahnfreunde entwickelt

...

fedecrail 18.04.2008

www.railway-planner.net

10

Vorteile für den Besucher

- nur noch eine Adresse!
- alle Termine auf einen Blick, immer tagesaktuell
- Steuerung und Anzeige in verschiedenen Sprachen
- alle Veranstalter in einer Übersicht
- ...

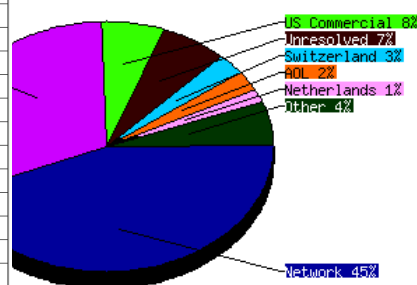
fedecrail 18.04.2008

www.railway-planner.net

11

Woher kommen die Besucher

1	83897	45.05%	8352	38.40%	1504535	Network
2	54608	29.32%	9362	43.04%	723594	Germany
3	14952	8.03%	355	1.63%	471161	US Commercial
4	13248	7.11%	1457	6.70%	233673	Unresolved
5	4833	2.60%	584	2.69%	84499	Switzerland
6	3870	2.08%	466	2.14%	47126	AOL
7	2652	1.42%	272	1.25%	38191	Netherlands
8	1133	0.61%	79	0.36%	39565	Italy
9	1115	0.60%	135	0.62%	24284	France
10	986	0.53%	53	0.24%	22286	Austria
11	935	0.50%	266	1.22%	18343	Belgium
12	921	0.49%	66	0.30%	17294	Japan
13	402	0.22%	37	0.17%	4984	Poland
14	379	0.20%	89	0.41%	7295	Luxembourg
15	350	0.19%	30	0.14%	5220	United Kingdom
16	328	0.18%	11	0.05%	10641	Czech Republic
17	227	0.12%	10	0.05%	3210	Denmark
18	142	0.08%	1	0.00%	3319	US Military
19	140	0.08%	21	0.10%	2152	Spain
20	130	0.07%	0	0.00%	6823	Slovak Republic
21	107	0.06%	37	0.17%	1240	Sweden
22	98	0.05%	0	0.00%	6714	Taiwan
23	97	0.05%	0	0.00%	4893	Non-Profit Organization
24	94	0.05%	2	0.01%	1196	Hungary
25	82	0.04%	17	0.08%	896	Australia



Hits by Country
100% = 186224 hits

y-planner.net

Stand: 31.03.08

12

Vorteile für den Veranstalter

- einfache Termineingabe durch den Veranstalter (Beispiel?)
- leicht Mehrsprachig möglich
- sich wiederholende Veranstaltungen können aus dem Archiv in die Zukunft kopiert werden
- Attribute setzen möglich
- Automatische Anzeige der eigenen Termine aus dem EP auf anderen Seiten möglich (UEF)...

fedecrail 18.04.2008

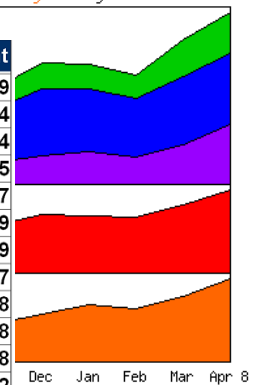
www.railway-planner.net

13

Entwicklung der Besucherzahlen

Hits/Files/Pageviews/Sessions/Kilobytes by month

Month	Hits	Files	Pageviews	Sessions	KBytes sent
April 2008	88400	67093	30134	10361	1656529
March 2008	186224	138151	51114	21184	3290974
February 2008	140547	110853	34630	17416	2619064
January 2008	154958	121935	41101	17735	2826955
December 2007	157002	123095	35553	18281	2379427
November 2007	123148	95833	26877	14719	1889009
October 2007	137779	99121	28181	13585	2085029
September 2007	129342	101766	29481	13693	2127677
August 2007	127215	98798	33517	14563	2232218
July 2007	116782	88942	27690	11700	1987378
June 2007	132377	99687	31114	11683	2284138
May 2007	149884	110685	34098	13483	2466762
Total	1643658	1255959	403490	178403	27845156
Average	136971	104663	33624	14866	2320430



14

Fazit

- minimaler Aufwand für weltweites Marketing
- der Besucher muß sich nur eine Adresse merken!
- gegenseitiges Marketing, da der zufriedene Besucher auch alle anderen eingetragenen Bahnen ohne langes Suchen sofort erreichen kann

fedecrail 18.04.2008

www.railway-planner.net

15

Kosten, wofür ?

- bis 31.12.08 umsonst
- ab 1.1.09 Schutzgebühr:
5,- € pro Monat (60,- € p.a.)
gemeinnützige Einr.
gegenseitige Verlinkung
- Deckung laufender Kosten
- professionelle Weiterentwicklung
- mehrsprachige Hotline

fedecrail 18.04.2008

www.railway-planner.net

16

Die Zukunft

- Die Regionen-Filter werden durch aktive Karten ersetzt
- die Sprache wird automatisch der des Benutzers angepasst
- Der Nutzer kann seine eigene Standarteinstellung hinterlegen
- Veranstalter werden mit ihren Standorten in die Karten integriert

fedecrail 18.04.2008

www.railway-planner.net

17

Vielen Dank!

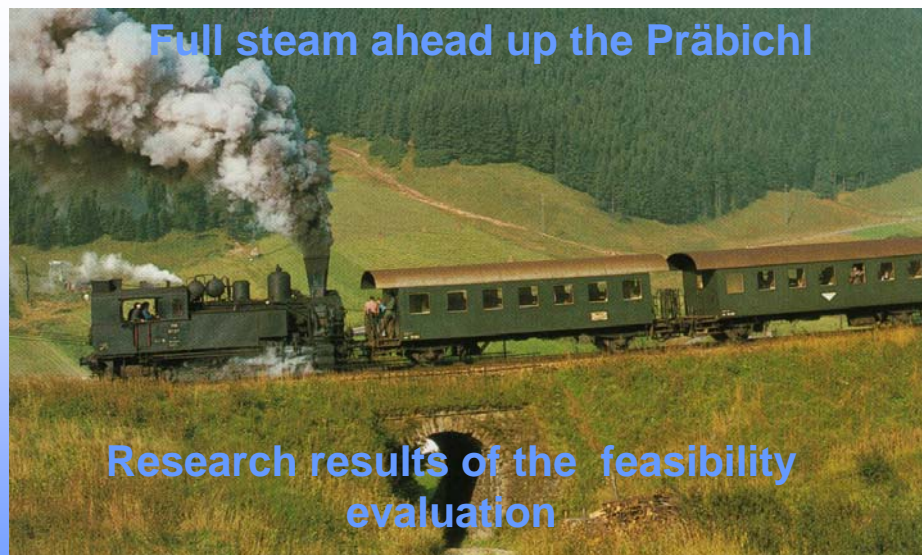
- ★ Für Fragen stehe ich gerne zur Verfügung!



fedecrail 18.04.2008

www.railway-planner.net

18



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Erzbergbahn at present:

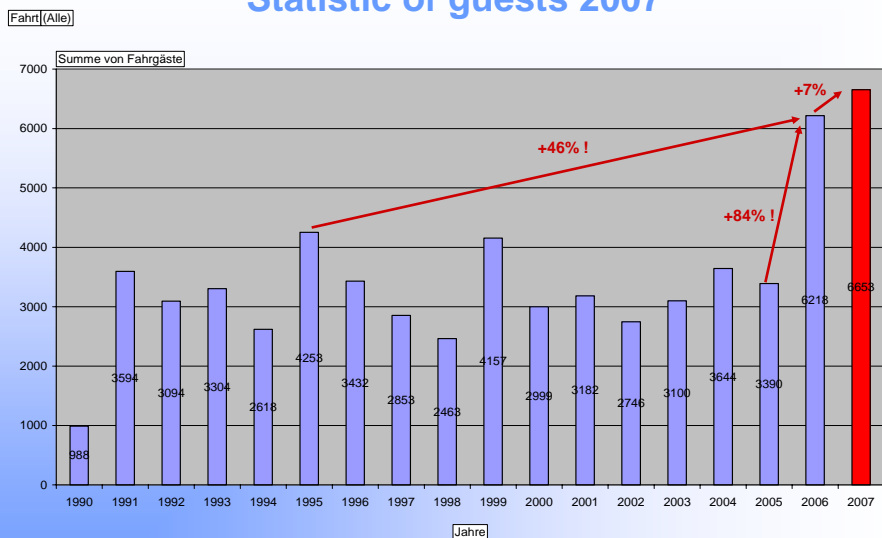
- Organised as association approx. 350 members
- Association owns the track Vorderernberg- Markt-Krumpenthal and operates the train in Vorderernberg and the station Erzberg
- Approximately 6500 guests on 100 trains a year



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Statistic of guests 2007



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Rolling stock at present

2 small diesel shunting locomotives X150 (Köf)
(not operational)

heritage railway 97.217

2 Motorbahnwagen X616
1 Motorbahnwagen X626

4 railcars 5081.5



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Existing cooperation



Adventure Erzberg + railway

- Joint leaflet
- Joint internet appearance (www.erzbergplus.at)
- Joint exhibitions
- Joint tickets

Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Existing Cooperation



Adventure Erzberg + railway

- Transfer station – mining museum
- Joint events (opening of season – The mountain calls, with train + hauly through the night)



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Existing cooperation



- Packages with ÖBB adventure railway Ennstal

- Miners' tour

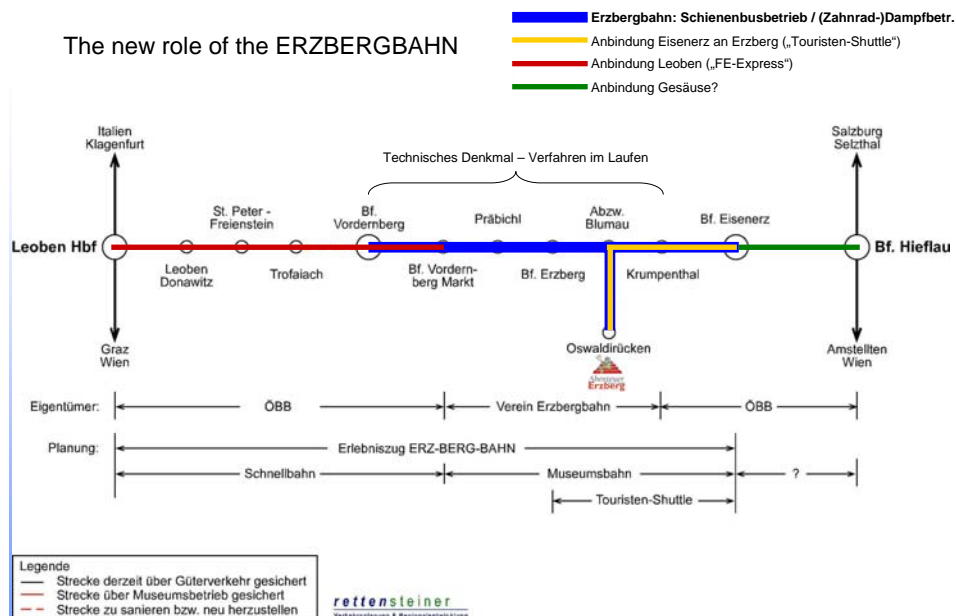
- Link-up programme for ÖBB-special trains



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

The new role of the ERZBERGBAHN



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

re-launch of steam engines

3 central questions:

- Technical feasibility
- economic tenability
- economic effects on region



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

re-launch of steam engines

Development:

- Rettensteiner / Novak / Eltner
- Accompanying working group
- Technical support of DI. Moser, DI. Zajic
- Calculations by ÖBB Infrastruktur Betriebs AG
- Calculations by Firma Knorr Bremse
- Cost estimation by Fa. Swietelsky
- Cost estimation by Steam engine factory Meiningen
- Cost estimation by Factory DLM Winterthur
- Cost estimations by various associations
- Special offer of Firma Tai Yong Tong Ze Complete Equipment Co., Ltd on a rack



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

re-launch of steam engines

Technical feasibility

Operation of rack – and – adhesion systems



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Feasibility of operating an adhesion steam system

Operating an adhesion system

If so, then with the steam engine 197.301

- **Trailing load: up to 130 tonnes (loc 97.217: 38 tonnes)**
- **authentic operation, in principle available**

Basic agreement of the
Department of national
heritage and ÖBB-Holding



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Feasibility of operating an adhesion steam system

Slowing down the train:

- It is possible to bring the train to a halt at 71 ‰ by only fitting the coaches with a magnetic track brake!
- Need of strengthening of and consoles in the floor of the coach, probably also (rods?) Ausgleichsgestänge like for railcars
- Further investments in electric supply (at least 2,5 kW ensured) and transistors are needed.
- Costs for magnetic track brake per coach: ca. EUR 15.000 (without the repairs on the floor of coaches, energy supply)



Mit Volldampf auf den Präbichl



Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Feasibility of operating a rack steam railway

If operating a rack steam railway

Then with the loc 97.217

loc 97.217:

- best maintained original steam engine
- main inspection necessary
- guaranteed independence

Costs to make it operating:
EUR 450.000 to 600.000
Depending on state of boiler

(estimation by Meiningen)

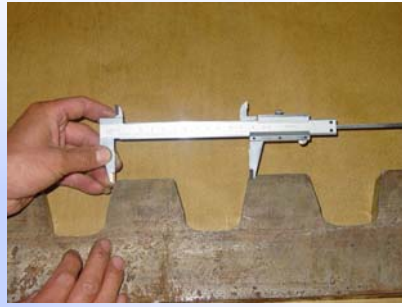


Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Feasibility of operating a rack steam railway

Rack:



**The complete rack line newly built. Because of financial reasons it will be used on a single lamella rack.
Cheapest quote from China: ca. 1 Mio for 12 km**



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Necessary infrastructure to operate a steam railway

Garage

Coaling, Cleaning



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Necessary infrastructure to operate a steam railway

turntable pits



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

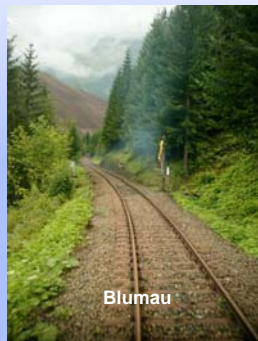
Necessary infrastructure to operate a steam railway

Water supply units:

Train stations: Bf. Vordernberg, Glaslbremse,
Bf. Erzberg, Blumau, Bf. Eisenerz



Bf. Vordernberg



Blumau



Bf. Erzberg



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Necessary infrastructure to operate a steam railway

The track:

Complete restauration - EUR 1,2 Mio

Must be organized independently from steam railway



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Reintroduction of steam railways

economic tenability



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Reintroduction of steam railways

Preconditions to operate steam railway

The business has to be self-supporting!

The running business should not finance the costs of the investment.

Assumption for cost estimation: one set includes a steam locomotive and 4 coaches

(INDEPENDENT from rack- and adhesion - systems)



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Reintroduction of steam railways

Results - operating the adhesion system

(Vordernberg – Eisenerz and return)

Costs per run: from EUR 1.390,-- to 1.500,--

Proceeds per run: EUR 1.608,--

Assumptions:

Average income per guest: EUR 12,--

An average of 134 people per train



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Reintroduction of steam railways

Results - operating the rack railway (Vordernberg – Eisenerz and return)

Costs per run: from EUR 1.400,-- to 1.520,--

Proceeds per run: ca. EUR 1.880,--

assumptions:

Average income per guest: EUR 14,--

An average of 134 people per train



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Reintroduction of steam railways

Economic tenability - evaluation

**Both varieties fulfill the requirements of an
efficient business.**

(fom ca. 30.000 guests onwards).

Financial investments cannot be refinanced.



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Reintroduction of steam railways

Economic effects on region



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Reintroduction of steam railways

Starting point:

Representatives of businesses appreciate an attractive steam railway service on the Erzbergbahn !

All project partners want the line Leoben – Vordernberg to be maintained and include it as a tourist attraction.



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Reintroduction of steam railways

Opportunities of combining attractions

- Adventure Erzberg + Erzbergbahn, „With a steam railway from Leoben to Erzberg“
- Conference centre Leoben + adventure Erzbergbahn
- Main attraction at „Steirischen Eisenstrasse“
- Guests of A1-circus (Zeltweg) and adventure Erzbergbahn
- Cooperation with VAE Leoben Donawitz



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Reintroduction of steam railways

Direct benefits for the region:

**Strong positive effects on everybody internally involved
(high identification)**

Increased profile of the region

30.000 guests per year:

Direct business impact on employment: 2 – 4 employees

**Indirect impact on employment due to guests spending
money in the region (day guests): 4 – 10 employees**

**Indirect impact on employment due to guests staying
over night: 10 - 22 employees**

+ more requests due to the investment into the region

+ more proceeds of local businesses



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Reintroduction of steam railways

Economic effects on region - conclusion

Steam railways on the Erzbergbahn provide proven direct benefits

There is a big chance that private initiatives will follow due to the high identification with the project

There will be an internationally unique offer connected with „adventure Erzberg“



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Reintroduction of steam railways

What effects had the research so far?

The whole of the region up to Leoben wants the steam rail service

Submission of the project at LEADER-Programme of the EU

Enthusiasm of the ÖBB-Holding for this project

Special offer of GKB (Graz-Köflacher Eisenbahn) to run trains between Leoben - Vordernberg

Common development of the project with „adventure Erzberg“ and Re-Design Eisenerz

maintaining coaches and locomotives



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Reintroduction of steam railways



Die Stadtgemeinden Eisenerz und Vordernberg, der Verein Steirische Eisenstraße und der Verein Erzbergbahn möchten die Vision wahr werden lassen. Der einmalige Terrassenberg aus Eisenerz, die in Österreich beispiellose Fülle historischer Spuren einer tausendjährigen bergmännischen und industriellen Vergangenheit, die dazu gehörende Erzbergbahn mit Dampftrieb – sie sollen sich zu einem harmonischen Ganzen verbinden und dem strukturschwachen, von Arbeitsplatzverlusten und Wegzug geplagten Gebirgsland der Eisenerzer Alpen touristisch auf die Beine helfen. Dementsprechend groß



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Reintroduction of steam railways

What's missing ?

To implement the entire project (ca. €7,0 Mio) the Land Styria would have to support it with €2,0 Mio. This funding is still missing.

For such a big business (30.000 guests per season) professional staff will be needed. Just volunteers won't be able to manage it.

**First step 2008: expansion of runs with railcars – even Saturdays and better timetables –
Adventure Erzberg + railway**



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Mission Statement

**Development of a museum railway
into a touristic railway with corresponding frequency,
always conserving historic roots!**
(independent from the kind of traction)



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Requirements

- professional staff mixed with volunteers
- cooperation with adventure Erzberg



- cooperation with Leoben – target: connection to Vordernberger Bahn



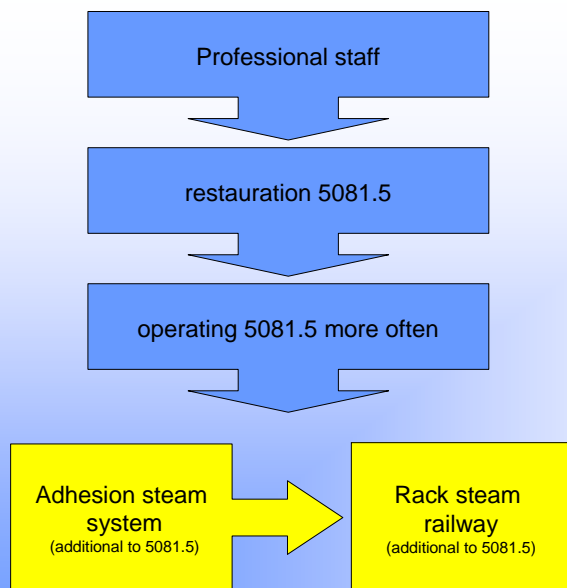
- cooperation with Vordernberg and Eisenerz – target: Shuttle Eisenerz - Erzberg



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart

Strategy



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart



Thank you for listening!



Mit Volldampf auf den Präbichl

Tagung FEDECRAIL 18.04.2008
G. Rettensteiner / E. Erhart



The Heritage Rail Sector Interaction with the Rail Industry and Government The Australian Experience Are there any lessons ? April 2008

Presented by Warren Doubleday for Chris Le Marshall

Slide 1



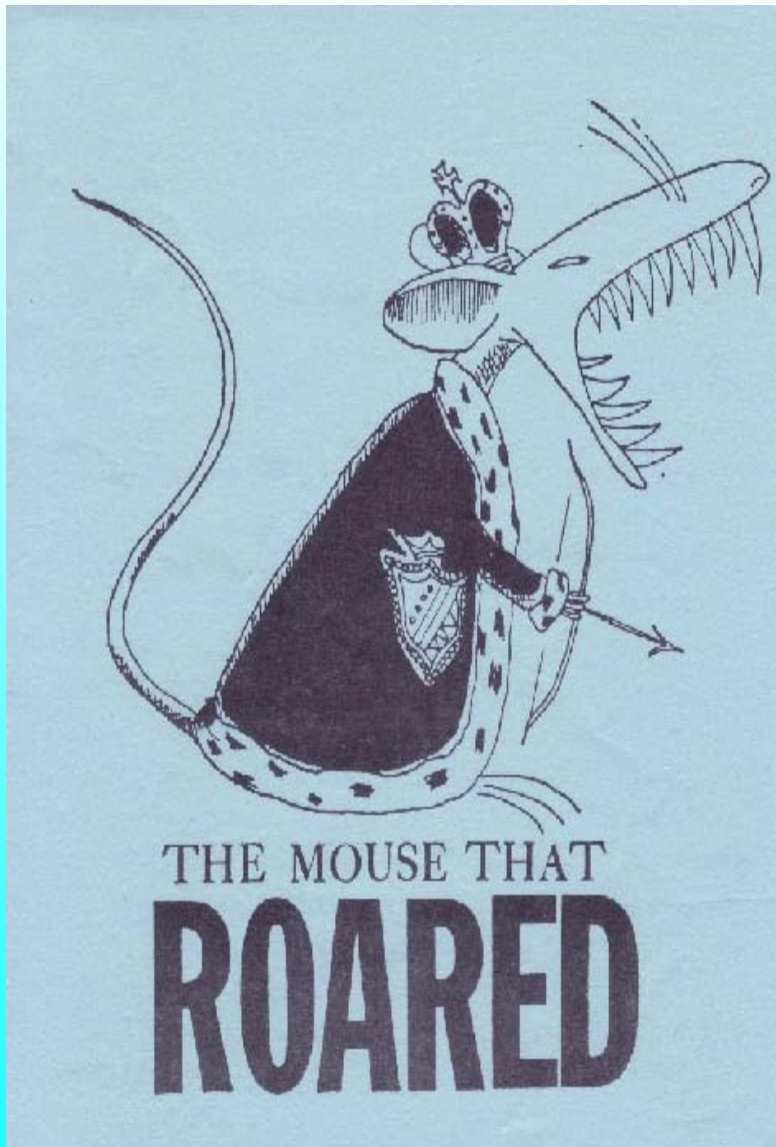
LINQAGE INTERNATIONAL

Chris Le Marshall - The Australia Experience
Copyright FEDECRAIL and Author, 2008



The Mouse that Roared

How a small player can gain leverage



Slide 2



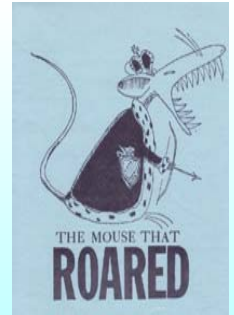
LIQAGE INTERNATIONAL

Chris Le Marshall - The Australia Experience
Copyright FEDECRAIL and Author, 2008





Background



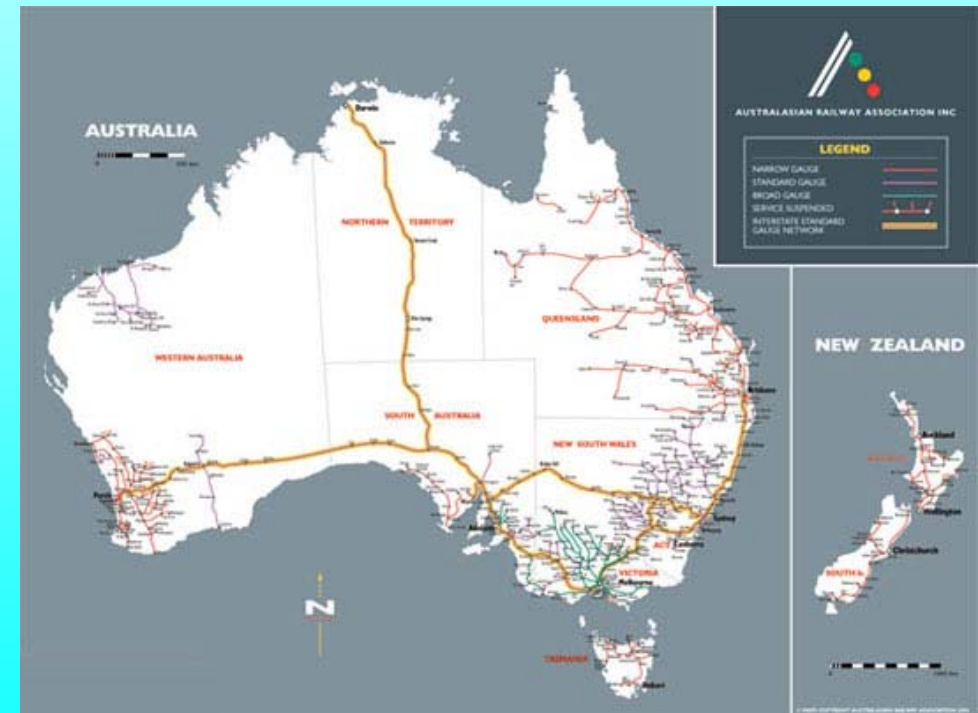
) Time in History - Government to Non Government

) Need for a United Approach

) ATHRA



) ARA



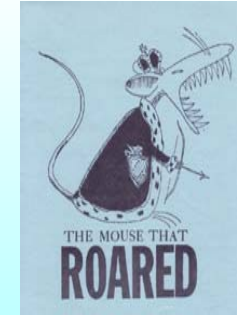
Slide 3



LINQAGE INTERNATIONAL



Imbedding Heritage in the Industry Benefits



-) Consulted on Changes - Input
-) At the Table with the Regulators
-) Can Mutually Support
-) Strategic Initiator
-) Contribution to Standards and Code Development

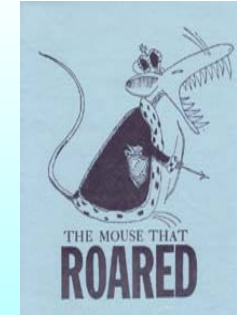
Slide 4



LINQAGE INTERNATIONAL



Imbedding Heritage in the Industry Consulted on Changes



-) Co - Regulation / Over Regulation
-) Input on Legislation and Regulation
-) The Training Example - Registered Training Organisation

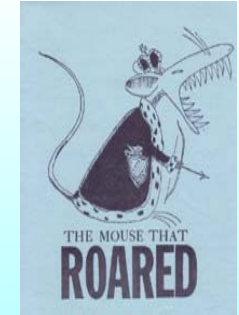


Slide 5



LINQAGE INTERNATIONAL

Chris Le Marshall - The Australia Experience
Copyright FEDECRAIL and Author, 2008



Imbedding Heritage in the Industry At the Table with the Regulators

-) Familiarise Regulators with Heritage
-) Assist Regulators to Improve Sector Capacity
-) Support for Key Initiatives - Training

Slide 6



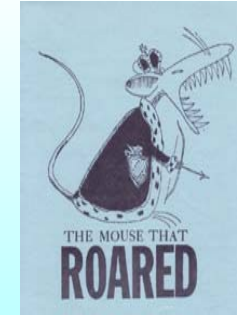
LINQAGE INTERNATIONAL

Chris Le Marshall - The Australia Experience
Copyright FEDECRAIL and Author, 2008





Imbedding Heritage in the Industry Can Mutually Support



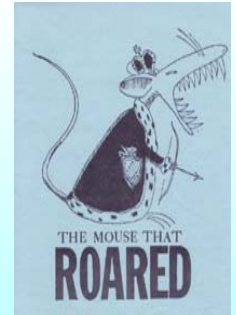
-) Heritage - Everyone Likes a Steam Train or Old Tram
-) Soft Face of Rail
-) Assist in Areas such as Recruiting



Slide 7



LINQAGE INTERNATIONAL



Imbedding Heritage in the Industry

Strategic Initiator / Supporter

-) Over Regulation
-) Sector Capacity Building
-) Deemed to Comply



Move to a Single Regulator for Rail



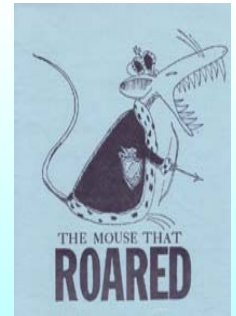
Slide 8



LINQAGE INTERNATIONAL



Imbedding Heritage in the Industry Contribution to Standards and Code Development



-) Development of a Boiler Code
-) Involvement in all standards, codes and guidelines developed by the Rail Industry Safety and Standards Board



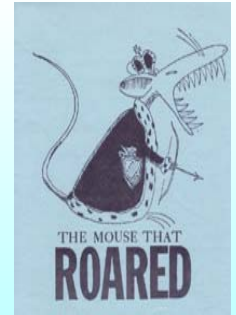
Slide 9



LINQAGE INTERNATIONAL



Influencing Government ATRQ



-) Government Owned Enterprise
-) Huge Increase in Insurance
-) Development of Economic Impact Data

Slide 10



LINQAGE INTERNATIONAL

Current Contribution to the Queensland State Economy by Sector

Queensland Tourist and Heritage Rail Sector

The total annual state spend for people visiting enterprises in the sector is:

International - Contribution - \$91 per day
Contribution - \$0.173M

Domestic Overnight - Contribution \$157 per day
Contribution - \$2.246M

Domestic Day - Contribution \$101 per day
Contribution - \$2.528M

Total Direct Contribution \$4.946M

Total Direct and Indirect Contribution = \$14.839M

One job in tourism for every \$79,000 of input from tourism

62.6 FTE jobs created
plus 125.2 jobs from indirect contribution
Total - 187.8 FTE jobs

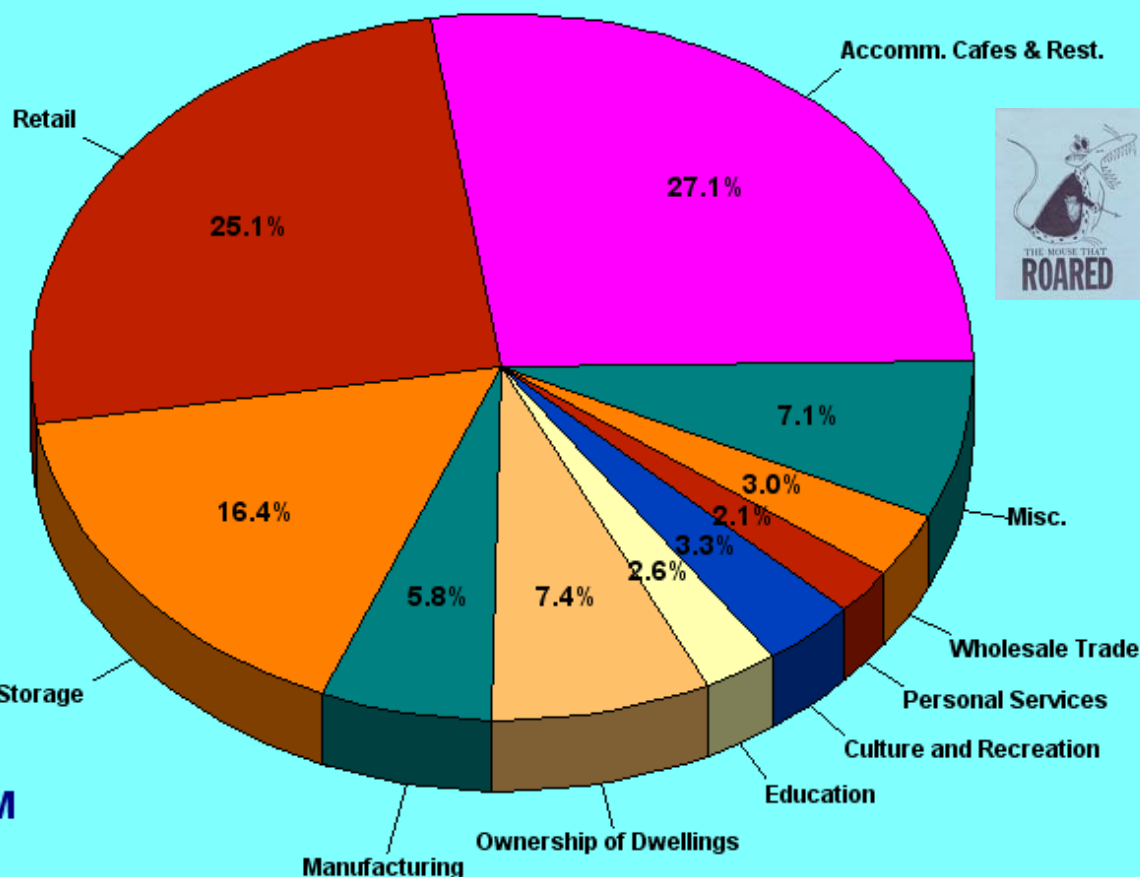
Slide 11

Compiled by:



LINQAGE INTERNATIONAL

Chris Le Marshall - The Australia Experience
Copyright FEDECRAIL and Author, 2008



Sectorial Contribution

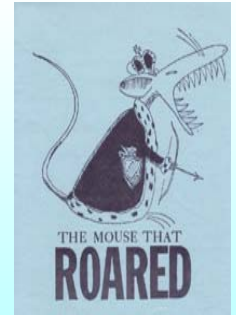
Total contribution - Direct - \$4.946M, Indirect - \$14.839M

Source - The Contribution of International and Domestic Expenditure to the Queensland Economy 2003 - 2004 - Queensland Government Office of Statistical Research, Tourism Queensland, and ATRQ





Influencing Government ATRQ



Outcome - Decision Reversed

Slide 12



LINQAGE INTERNATIONAL



The Heritage Rail Sector
Interaction - Rail Industry and Government
The Australian Experience
Are there any lessons ?



-) Develop Relationships within the Rail Industry and with Government
-) Engage - But Think and Research Before You Speak
-) Identify Mutual Benefits

Then - in a measured way -

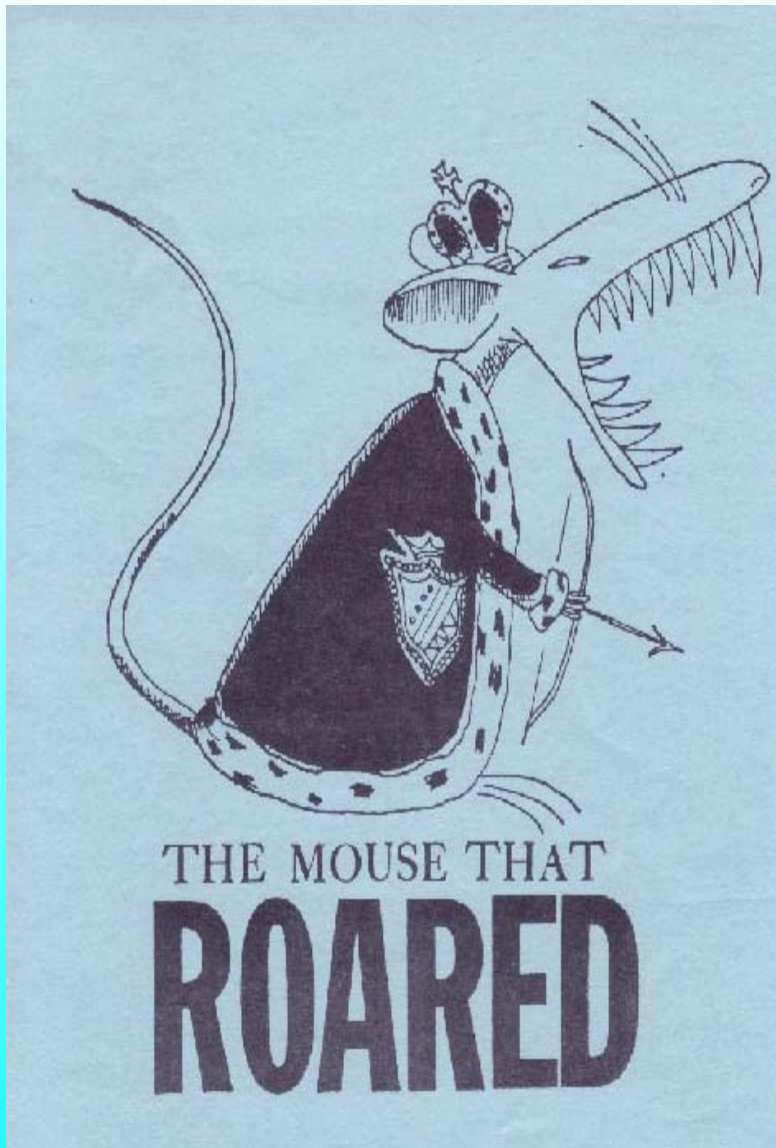
Slide 13



LINQAGE INTERNATIONAL



Roar a Little



Slide 14



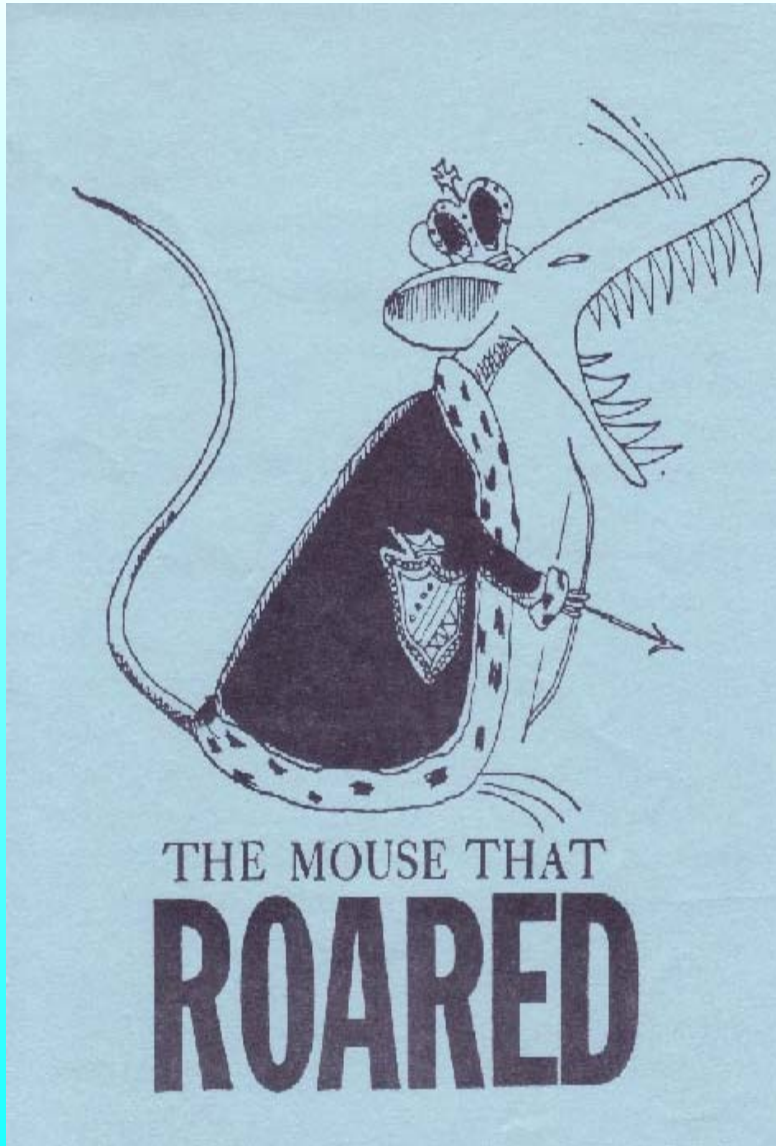
LINQAGE INTERNATIONAL

Chris Le Marshall - The Australia Experience
Copyright FEDECRAIL and Author, 2008





Questions ?



Slide 15



LINQAGE INTERNATIONAL

Chris Le Marshall - The Australia Experience
Copyright FEDECRAIL and Author, 2008



THE HERITAGE RAIL SECTOR - INTERACTION WITH THE RAIL INDUSTRY AND GOVERNMENT THE AUSTRALIAN EXPERIENCE ARE THERE ANY LESSONS?

April 2008

Presented by Warren Doubleday for Chris Le Marshall

Slide 1

Firstly, I wish to apologise on behalf of Chris. Chris had planned to be at the Fedecrail conference with an aim of presenting this paper. However, his work within the rail industry has been somewhat delayed by some tardy contributors to a strategy that is currently under development so unfortunately he had to stay home and work to earn a dollar. He does apologise.

This presentation is based on the experiences gained by Chris as a strategic planner and business planner to the sector and as Heritage Liaison Officer for the Australasian Railway Association, a position he has held since 2004.

Chris and I work in parallel and indeed many of the experiences related in the presentation I've shared with him because of my role within ATHRA, the Association of Tourist and Heritage Railways Australia, where I am responsible for consulting the sector and providing effective input on matters related to regulation and safety. I also sit with the Regulators Panel when the State Regulators meet four times a year to discuss common issues. Basically, I work with the Australasian Railway Association (ARA) and Chris to ensure

that the interface between the heritage sector and the rest of the industry is okay, and we actually achieve outcomes that are optimal for the heritage sector, and indeed, the rail industry.

Interaction with the rail industry and government? We think another title for this would be, moving to slide 2,

Slide 2

‘The Mouse that Roared. How a Small Player Can Gain Leverage’, because really that’s what it is about.

Looking at history, what has happened in Australia that enabled, if you like, the heritage sector to roar a little?

Slide 3

Well firstly, in the last two years the rail industry has undergone more change than it had in the previous 100 years. Effectively the government railways are moving to corporate entities. In most cases those entities are owned by government, in some cases they are not. We’ve effectively corporatized, and indeed privatised, a large part of the sector.

The rail industry realised that in order to speak with one voice there was a need for the heritage sector to be embraced by the rest of the industry, so that when we were talking with regulators and legislators we could say that the ARA represented the industry. That is important when it is noted that about one third of all rail accredited organisations in Australia are in the tourist and heritage sector.

At the time there were initiatives underway to develop an Australian heritage rail peak body and indeed ATHRA, the Association of Tourist and Heritage Railways, grew out of that need. It was basically initiated by the Tourist and Heritage sector and supported by the ARA. ATHRA is now a national peak body for the tourist and heritage railway industry in Australia, and that is very, very important and quite effective.

Slide 4

Because of the need to speak with one voice, effectively, we've been able to embed the heritage sector into the rail industry. The benefits have been many, but the key benefits are firstly, we are consulted on changes and, indeed, we have input to the various changes that are proposed to regulations and legislation.

Additionally we are at the table with the regulators. There is a Regulators Panel held four times a year and the heritage sector has a place at the table. We are able to mutually support the rest of the rail industry, obviously to the benefit of both, and indeed, we can be a very effective strategic initiator. That is very important.

The final benefit is that our relationship with the ARA and the Rail Industry Safety and Standards Board (RISSB) has resulted in the heritage sector's involvement in development of all codes and standards. As will be seen later, it has been very beneficial.

Slide 5

If we look at consultation on changes, I think Australia is probably unique because the environment is supposed to be a co-regulatory environment, but

there is no doubt we are over regulated. By estimates made we effectively have more public servants regulating than we actually have people out there in the field developing safety management systems and meeting the direct needs, if you like, of the rail safety regulators. So, we are certainly over regulated. That means effective input related to proposed changes is essential.

We've been able to have very effective input to the legislation and regulations that have been developed, to the extent that in 2006 one of the key ATHRA contributors, Graeme Breydon, was actually given an award by the ARA for the single most significant contribution by an individual to the rail industry. The sector has certainly punched well above its weight. We have been able to get some very sensible changes incorporated and bring a little bit of sanity to some of the proposed changes.

For example, there is currently an initiative running that says all of the training within the rail industry, including the heritage sector, should be provided by a nationally recognised Registered Training Organisation. Now, it means that we'll probably introduce another level of documentation and regulation, which is probably the equivalent of the rail regulatory regime for training – at huge cost.

Our argument in opposing is that we've been able to train our people effectively within the sector for the last 50 years, because that's how long some of our operators have been going. We have been operating safely, and we think it is a bit of an over-correction. It is interesting that on this initiative we've got the support of the Rail Regulators, and indeed, we have actually

achieved to date a very good outcome and we think it will be resolved in our favour.

So, embedding yourself with the industry means you are consulted, you do have input, and you can in fact, get outcomes that are optimal for the sector and the industry.

Slide 6

Having a seat at the Regulators Panel is very important to the heritage sector, because regulators appreciate being in an environment where there is somebody who is familiar with the sector.

Given that a significant proportion of accredited organisations within Australia are heritage organisations, regulators find that availability of someone with first hand experience is very, very valuable. We can also assist the regulators in improving sector capacity. Nobody wants to shut down a heritage railway or a tramway because they're unable to comply. If there is a genuine wish within such organisations to comply but they don't have the capacity, our regulators will actually work with whatever agencies they can to improve the capacity within that organisation. ATHRA and the ARA have been at the forefront of advising the regulators on the way in which that can be achieved.

Linked to this, earlier ATHRA was involved with the ARA and the Rail Skills Council in development of competencies for the heritage sector and the rail industry.

We were able to build a case that we put to the regulators that we should use those competencies as a basis for development of full lesson plans and

checklists so we could all train and examine people across the sector to a common standard. It is a very large project.

We will take what we have at the moment in terms of training information and lesson plans, bring the best together and develop the lesson plans and checklists. The initiative was supported by the regulators and they assisted us in getting funding. Funding has been achieved and the consultant is about to be employed. The outcome will be web-based and we'll actually have a mechanism where any ATHRA member across Australia can link to the web, download the lesson plans, download the training checklists and get started.

Slide 7

Basically, everybody likes a steam train, everybody likes an old tram. Heritage is seen as being the soft face of rail and within Australia we've used that to the industry's advantage, with an aim of alleviating the severe staff shortages currently being experienced. An example of this is the Pathways Project.

The Pathways Project has been developed as an entry level project for people who wish to have a career in the rail industry. What we have done is to take 60 young people between December 2007 and July 2008, and give them an introduction to the rail industry with an emphasis on trackwork because that's where the main requirement is - on the track maintenance side.

The Rail Skills Council put the project together in conjunction with Puffing Billy, who are effectively the lead agents, and CONNEX, the Melbourne based operator of the suburban rail network. Puffing Billy is putting people

through, in a very benign environment, a course of training related to track maintenance and then extending that on to the main line, with an aim of those people migrating from the Pathways Project to full time employment within the industry.

The benefits for the industry are obviously increased recruitment, and the benefits for the heritage sector are that we're exposing the sector to young people who will retain an affiliation with the sector. Past experience has shown that there will be subsequent benefits from increased membership of heritage organisations. So it is win-win for both. In addition, the heritage organisation managing the programme can gain some financial benefit from the arrangement which is good.

Slide 8

The tourist and heritage sector can be an important strategic initiator and supporter.

As detailed earlier, there is no doubt that within the rail sector in Australia we are over regulated. There is a need for sector capacity building and it is recognised by the regulators. One of the things that has been of assistance to us is that the regulators ask 'How can we regulate better?' and ATHRA has been very constructive in developing a proposal that would see regulation of the heritage sector overhauled using a much simpler 'deemed to comply' concept. Effectively it says that if you are in this category of heritage operator, then this is what you must do. If you do this - you comply. It is a little more prescriptive, but it takes the doubt and the analysis out of it.

The concept suggested by ATHRA is being supported by the ARA and proposals have been initiated to develop various documents needed to introduce it within the heritage sector. It will be progressed by the Rail Industry Standards and Safety Board which is a wholly owned company operated by the Australasian Railway Association. It will require a fairly substantial investment.

It will assist the industry because if you look in the longer term we do want to move to a single regulator for rail within 5 years. The industry has its sights set on something strategically, and logically if it can get 'deemed to comply' elements in place for the heritage sector, it will be somewhat easier to migrate the industry to such a scheme and would lead to a much easier shift to a single rail regulator, and indeed, rail self-regulation.

Slide 9

The heritage sector through ATHRA has used its relationship with the ARA and RISSB to effectively contribute to standards and code development and also to influence development priorities. Development of a Boiler Code by RISSB for the heritage sector is an example. The code is being developed utilising ARA funding, RISSB resources, and significant input from the heritage sector. It will greatly add to the sustainability and safety of the sector.

Slide 10

So I've spoken about embedding ourselves in the industry and our relationships with the rest of the rail industry. I'll talk briefly now about influencing government. A recent case involved the Association of Tourist Railways in Queensland (ATRQ).

ATRQ were in a situation where the government enterprise that owned many of the lines on which heritage railways operated was promoting huge increases in public liability insurance requirements. It would have effectively seen a large part of the heritage sector close down in Queensland.

Slide 11

To their credit, ATRQ worked with Linqage International to develop the current contribution to the Queensland economy from the heritage rail sector. Basically the sector created 62 full time jobs plus 125 jobs from indirect contribution, totalling 187 jobs, and directly contributed about \$5 million, and indirectly contributed about \$15 million. It was backed by substantial research.

Slide 12

The data was accepted and the outcome saw the decision was reversed. A good outcome.

Slide 13

Now, what are the lessons learned here?

I think the first one, based on our experience in Australia, is that you develop your relationships within the rail industry and with government. It's no use trying to develop a relationship when there is a disaster and you need them. You've got to have the relationships developed well beforehand. It's all about people.

When you've got the relationships, engage people. Engage the key influencers but think and research before you speak, and that Queensland

example is a prime case. Indeed, whenever the heritage sector has contributed to comments on legislation and regulations, it's always been the outcome of very wide consultation and a lot of thought, which is what it's all about. Follow the old bit of advice "before you open your mouth engage your mind". That is what the sector does and it's been doing it very, very effectively.

Another thing we have done is to identify where mutual benefit lies and then, work to get the outcome. We always act in a quiet and measured way, but sometimes we do roar a little. And it works.

Slide 14

I do hope you've found that helpful. Any questions please?

Slide 15

Any questions?

Recent Research on Steam Locomotive Emissions

Dr Reinhard W. Serchinger
SePhys Munich, Germany

Recent Research on Steam Locomotive Emissions
SePhys Dr Reinhard W. Serchinger

1

Don'ts ...



Recent Research on Steam Locomotive Emissions
SePhys Dr Reinhard W. Serchinger

2

... and do's!



Recent Research on Steam Locomotive Emissions
SePhys Dr Reinhard W. Serchinger

3

The object under investigation



Recent Research on Steam Locomotive Emissions
SePhys Dr Reinhard W. Serchinger

4

Specifications for environmentally friendly steam locomotive coal

• Type of coal	Bituminous hard coal
• Lump size (for hand-firing)	80 – 120 mm or 50 – 80 mm
• Water (in mass-% of the crude coal)	≤ 5 %
• Ash (in mass-% of the crude coal)	≤ 6 %
• Sulphur (in mass-% of the anhydrous substance)	≤ 1 %
• Volatile constituents (in mass-% of the anhydrous and ash-free substance)	19 – 28 %
• Lower calorific value (of the crude coal)	> 28 MJ/kg
• Ash fusion temperature (T_B)	> 1300 °C
• Iron (of the anhydrous substance) (when air is lacking, Fe_2SiO_4 and FeO are formed and lower the melting point of the ash)	≤ 5500 mg/kg
• Mercury (boiling point = 357 °C) (of the anhydrous substance)	≤ 0.2 mg/kg
• Cadmium (boiling point = 767 °C) (of the anhydrous substance)	≤ 0.6 mg/kg

Recent Research on Steam Locomotive Emissions
SePhys Dr Reinhard W. Serchinger

5

Polish Locomotive Coal

(Lump size: 81.9 % 50 – 80 mm and larger)

Elemental analysis

• C	80.24 %
• H	4.84 %
• O	6.65 %
• N	1.27 %
• Cl	0.18 %
• S	0.40 %
• H_2O	2.70 %
• Ash	3.72 %

Other parameters

• Volatile constituents (anhydrous and ash-free)	32.02 %
• Lower calorific value (crude coal)	32.2 MJ/kg
• Ash fusion temperature (T_B)	1280 °C

Ash

• SiO_2	23.00 %
• Al_2O_3	12.65 %
• Fe_2O_3	19.38 %
• CaO	14.03 %
• MgO	8.41 %
• Na_2O	1.57 %
• K_2O	0.94 %
• SO_3	17.53 %
• TiO_2	0.50 %
• P_2O_5	0.13 %
• BaO	0.25 %
• Mn_3O_4	0.28 %
• SrO	0.11 %
• ZnO	0.88 %

Recent Research on Steam Locomotive Emissions
SePhys Dr Reinhard W. Serchinger

6

QJ Firing Instruction

- Shovels of coal should be placed in this order. The table symbolizes the firebox. The firehole is in the middle below.

1	9	4
5	9	8
7	10	6
3	10	2

- And this is the average relative amount of coal to be shovelled into each area per firing round. 100 = 100 % full shovel. The firehole is again in the middle below.

72	64	64	72
72	48	48	72
84	60	60	84
100	92	92	100

Recent Research on Steam Locomotive Emissions
SePhys Dr Reinhard W. Serchinger

7

Average Emissions per kg of Polish Locomotive Coal

The values given below are average values over 10 single measurements at full load, ashpan air inlet fully open, right firing technique, $\lambda_{\text{average}} = 1.55$ with a hole in the firebed once, otherwise $\lambda_{\text{average}} = 1.32$ (8 measurements).

Compound	mol/kg	g/kg	(at $\lambda = 1.5$) g/m ³	German law 2002
CO ₂	66.867	2942.1	232.53	not regulated
CO	1.585	44.4	3.51	> 0.15
NO _x	0.113	5.2	0.41	< 0.50
HC	0.0035	0.15	0.01	not regulated
SO ₂	0.067	4.29	0.34	< 1.30

If all the sulphur in the coal were burnt, SO₂ emissions would be at 8.0 g/kg. This means that only 53.6 % of the sulphur is actually burnt; the remaining sulphur forms solid compounds thanks to the favourable ash composition.

Recent Research on Steam Locomotive Emissions
SePhys Dr Reinhard W. Serchinger

8



Tradition & Romantik „auf Schiene“

„BahnAchse“:

von Salzburg über
Freilassing durch das
Salzkammergut nach
Oberösterreich





BahnAchse

- länderübergreifendes Projekt Österreich-Deutschland
- Initiative der Salzburger Lokalbahn
- 3 Eisenbahn- Museen
 - Lokwelt
 - SKGLB Mondsee
 - ÖGEG Ampflwang
- 4 Eisenbahn-Betriebe
 - Salzburger Lokalbahn
 - StadtBus
 - Festungsbahn
 - Schafbergbahn



Marketing BahnAchse

- Zielgruppe: Einheimische und Touristen
- Ziel: Geschichte leben und erleben
- umfangreiches Programmangebot
- gemeinsame Vermarktung
- Pauschalangebote für Reisegruppen
- Abwicklung der Buchungsanfragen über Incoming Spezialist – **Salzkammergut Touristik** in Bad Ischl (www.salzkammergut.co.at)



Lokwelt Freilassing

- Museum der Bahn-Stadt Freilassing
- Rundlokschuppen: historische Lokomotiven des Deutschen Museums
- „Kleine Lokwelt“ speziell für Kinder





Lokwelt Freilassing





Salzburger Lokalbahn

- Oldtimer Nostalgiefahrten
- jeden Samstag im Sommer
- Amateurlokführer
- „Auf Fluss und Schiene“
- Advent (Stille Nacht, Oberndorf)





Salzburger Lokalbahn





FestungsBahn / StadtBus

- seit 1892: FestungsBahn
- Standseilbahn zur Festung Hohensalzburg
- Der Obus ist eine Eisenbahn – mit „Schienen am Himmel“
- Sonderfahrten mit Museums-Obus 123





FestungsBahn / StadtBus





SchafbergBahn

- Touristischer Leitbetrieb im Salzkammergut
- Strecke: 5,9 km, 1.243 Höhenmeter
- Fahrtdauer: 40 Minuten
- neu 2008: Kaiserwagen
- WolfgangseeSchiffahrt





SchafbergBahn





Oberösterreichisches Eisenbahn- und Bergbaumuseum der ÖGEG

- 1974: Gründung des Vereins Österreichische Gesellschaft für Eisenbahngeschichte
- April 2007: Eröffnung des Museums in Ampflwang, Schwerpunkt: Eisenbahn und Bergbau
- Nostalgiefahrten





Oberösterreichisches Eisenbahn- und Bergbaumuseum der ÖGEG





Museum der Salzkammergut-Lokalbahn

- 1890 -1891: Heizhaus
- 1996: offizielle Eröffnung
- zeigt die Geschichte der Schmalspurbahn, Fahrzeuge, Lokomotiven und Waggons





Museum der Salzkammergut-Lokalbahn





Zukunft: mögliche Erweiterung Österreich:

Pinzgauer Lokalbahn, Taurachbahn,
Murtalbahn, Museum Schwarzach

Deutschland:

Chiemgaubahn, Torfbahn Ainring,
BerchtesgadnerBahn



- Tourismus – Thema „**Eisenbahnromantik**“
- Interesse wecken, Gefühle ansprechen, Erwartungen erfüllen
- Angebot für die ganze Familie (nicht nur Eisenbahn-Freaks!)
- gemeinsame Vermarktung – eine Zielgruppe
- Fahrten – Programme – Events - Packages
- Folder BahnAchse

- geplant 2008:
 - Sammelpass
 - Homepage
 - Vorträge
 - Pressereise
 - Projektentwicklung:





EUREGIO Projekt

- Co-Finanzierung für grenzüberschreitende Aktivitäten
- Schaffung von neuen touristischen Angeboten
- **Professionalisierung** (Personal)
- Gemeinsamer Auftritt, Kooperationen, Vermarktung
- Nachhaltige Positionierung (Marke)
- Gäste = Kunden = Ertrag

- in Planung 2008, Auftakt ist erfolgt



Vermarktung = Verkauf = Kunden = Ertrag

- Web-Auftritt, Informationen im Internet
- Mailings an Adressen: Freunde, Klubs, Unternehmen..
- Erlebnisse für Touristen (Gefühle, Lernerfahrung..)
- neue Zielgruppen: Frauen, Senioren, Unternehmen
- kontinuierliche Pressearbeit, Fotos
- buchbares Angebot, Packages, Kooperationen





- Danke für Ihre Aufmerksamkeit
- Thank you for your attention
- merci pour votre attention



- angelika.gasteiner@salzburg-ag.at