Trans-European Networks

The Political Economy of Integrating Europe's Infrastructure

Debra Johnson
Senior Lecturer in Economics
University of Lincolnshire and Humberside

and

Colin Turner
Lecturer in Economics
University of Lincolnshire and Humberside
# Contents

**List of Tables, Figures and Maps** viii  
**Preface** x  
**Abbreviations and European Union Programmes** xiii  
**Map of Priority Projects** xvii  

## 1 Trans-European networks: Origins and History 1  
From Rome to Raj to Reich 1  
History of infrastructure policy in the European Union 7  
The emergence of modern TENs: from Action 8  
Plan to the Treaty on European Union 12  

## 2 Trans-European Networks as a Tool of European Integration 16  
The nature of the TENs programme and the emerging network economy 17  
Key themes in the TENs programme 20  
TENs, the SEM and EMU 21  
Industrial policy and the competitive environment 24  
Vocational training 26  
Knowledge networks 28  
Social and economic cohesion 29  
TENs and the environment 37  
External aspects of TENs 39  

## 3 Trans-European Transport Networks 45  
The evolution of transport TENs policy 46  
Transport trends 50  
Rail 52  
Roads 60  
Civil aviation 64  
Inland waterways 66  
Maritime sector 70  
Combined transport 72  
Telematics, traffic management and TENs 73  
Finance of transport TENs 78
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social and economic cohesion</td>
<td>81</td>
</tr>
<tr>
<td>Links with third countries</td>
<td>82</td>
</tr>
<tr>
<td>Conclusion</td>
<td>89</td>
</tr>
</tbody>
</table>

### 4 Trans-European Telecommunication Networks

Establishing a role for the EU in telecommunications infrastructure 91
Towards TENs: developing a strategy and establishing priorities 93
Telematics for administrations (TEN-IDA) 96
TEN-ISDN: the new public network 101
European policy towards the development of the ISDN 102
Progress towards E-ISDN themes and issues 104
TEN-IBC 109
A strategy for TEN-IBC 113
TENs and the information society 116
Conclusion 121

### 5 Trans-European Energy Networks

The evolution of trans-European energy network policy 122
The electricity network 125
The gas network 127
New moves towards energy TENs 129
Energy network challenges 130
The Former Soviet Union and the Energy Charter Treaty 143
The Mediterranean region 145
Conclusion 147

### 6 The Financing of Trans-European Networks

The nature of the financing problem 149
Practical constraints upon capital market involvement 151
Overcoming market failure: maintaining a role for the public sector 153
Developing a role for the private sector in the European Union’s infrastructure 154
Public/private partnerships 157
The role of the EU in the financing of TENs 159
The evolving role of the EU 162
European Investment Bank 164
European Investment Fund 166
The evolution of the financing issue 166
Contents

The financing of TENs: the challenge for the member states 169
Conclusion 172

7 Common Considerations in the Development of Trans-European Networks 174
TENs: a European or national initiative? 174
The implications for national infrastructure planning 176
Liberalisation and the development of TENs 178
A legal framework for TENs 180
Universal service and public service obligations 185
Administration of trans-national projects 186
Externalities 187
Conclusion 189

Notes and References 191
Bibliography 206
Index 219