Part IV
Application Domains, Case Studies and Tool Support
This fourth part of this book treats different application domains and case studies according to different parts of the theory given in Parts II and III, respectively. Moreover we give an overview of different tools, which support modeling and analysis of systems using graph transformation techniques presented in this book. In Chap. 10, we introduce self-adaptive systems and show how they can be modelled and analysed using graph transformation systems in Chap. 2, including a case study concerning business processes. The application domain of enterprise modelling is considered in Chap. 11, based on Chapters 3, 7 and 8, together with a case study on model transformation between business and IT service models. Chap. 12 includes a discussion of the following tools:

1. The Attributed Graph Grammar system AGG 2.0,
2. ActiGRA: Checking consistency between control flow and functional behaviour,
3. Controlled EMF model transformation with EMF Henshin,
4. Bidirectional EMF model transformation with HenshinTGG.