Drawing on surveys conducted by the OECD in its member states since the early 2010s, we apply textual analysis to the description of the status of regulatory agencies (RAs) in different European countries and sectors, together with a characterization of their relationships with various stakeholders, and of their duties and the means at their disposal. Four independent dimensions seem to characterize regulatory governance regimes: independence from the government; the level of discretion of the RA; the scope of its market monitoring capabilities; and its ability to ensure transparency of the supply side. Our regulatory governance indicators exhibit significant correlations with industry evolution and performances. However, there is divergence across industries. This might partly reflect differences in terms of “maturity.” Younger RAs seem to be characterized by greater informality and access to a more limited set of regulatory tools. However, it is not certain that sectoral regulators are converging toward a common model, since they are operating in industries with contrasted economies which might result in different agendas for the RA. In the e-communications sector, regulatory governance seems critical to performance in terms of quality of service (broadband), while in the electricity industry, the main objective of the RAs seems to be the price of energy, even at the cost of the environmental quality of electricity. In the transportation industries (air and rail), the focus is on the volume / development of traffic and on safety improvements. Compared to previous studies, our results differ on two main grounds. First, we point out that the extent of the RA’s discretionary powers matters (in addition to independence). We also highlight that RAs have to promote transparency (in addition to designing markets and setting tariffs). Over the past years in Europe, the most significant developments have concerned these two overlooked dimensions of regulatory governance.