

SUMMARY

Given the increase in the volume of container traffic moved around the world, forecast to double within 10 years, port authorities, particularly the Spanish Authority, must equip themselves to compete against neighbouring ports and ensure adequate capacity to meet the demands of the increased volumes of traffic. The current recession may delay the estimated growth rates but will not stop the process.

Technical and economic information for a selection of Spanish container ports has been put together; the research focuses on the in-depth study of nineteen of these terminals, selected according to the criteria of minimum traffic volumes (over 250,000 TEUs justifying a minimum investment in handling equipment), and where the ports are solely used as container terminal operators, in order to allow comparison of the index values obtained.

A series of technical and technical-economic operating parameters were selected for the study and the results analysed for the terminals. To analyse the social and political impact, curves were drawn with an 80 % confidence level, enabling these parameters to be obtained from surveys carried out in the sector (Port Authority Presidents, Councilors for Development and the Mayors of cities with State general interest ports under their influence). The different parameters (technical, technical-economic and social-political) were weighted with the results obtained in the above surveys, allowing the production of global indexes.

The conclusions reached using the above methodology indicates that the evolution of the handling of containers is closely related to the gross domestic product (1.8), and that the global estimated forecast for 2020 will be approximately 1,000 million TEUs, of which some 30 million will be in the Western Mediterranean region.

From an analysis of the leading global container terminal operators, a clear trend towards the concentration of businesses is observed, the 5 leading global container terminal operators holding more than 60 % of the global market share. Following an analysis of the profitability of terminal operators and comparing this with that obtained by shipping lines, it can be seen that while the shipping lines generate the business, as they carry the traffic, their profit margins (1-7 %) are significantly lower

than those of operators (from 17 to 25 %); therefore we would predict a tendency towards vertical integration by the shipping lines with the port terminal operators.

A high number of technical and technical-economic ratios have been drawn up and analysed, concluding that those of greatest interest for assessing potential offers and comparing them with other terminals around the world are: from a technical viewpoint, productivity by lineal metre and by square metre of wharf (TEU/ml and TEU/ha) and from the technical-economic viewpoint the earnings before interest, taxes, depreciation and amortisation per TEU (EBITDA/TEU), and the shareholder's return on equity (ROE).

The results of the survey carried out during the study are almost unanimous in agreeing that the social and political aspects must be considered by the port authorities when assessing an offer from a potential operator to manage a container terminal within the Spanish Authority for State general interest ports. The proposed indicators best accepted include gross value added (GVA) and the generation of employment (E). Therefore a least squares regression curve has been adjusted for these, enabling the gross value added and the direct and indirect employment generated in the port's area of influence to be easily calculated from the equivalent tonnage moved in each terminal, with a possible level of acceptance of 80 %.

Once the indicators for each of the aspects to be considered has been selected, when assessing an offer from a container terminal operator, and after weighting them with the results obtained from the survey, a formula has been produced permitting the total technical score of a potential bidder to be calculated, noting the negative consequences that, in order to reach the highest levels of business competitiveness, through the investment in advanced technology machinery, there may be excessive weighting of the social and political indicator indexes.

Furthermore, an ideal balance and profit and loss account by sales has been drawn up, using the best ratios obtained for the terminals selected. This will help in the successful selection of a potential partner.