Technologies watch exercise: foresight approach enhanced with scientific publications and patents analysis

Husam Arman*

School of Mechanical Materials and Manufacturing Engineering,
University of Nottingham,
Nottingham, UK
E-mail: husam.arman@nottingiJam.ac.uk
"Corresponding author

Allan Hodgson

Department of Electronic and Electrical Engineering,
Loughborough University,
Loughborough, UK
E-mail: al1an.sonofhodge@gmail.com

Nabil Gindy

School of Mechanical Materials and Manufacturing Engineering,
University of Nottingham,
Nottingham, UK
E-mail: nabil.gindy@nottingham.ac.l1k

Abstract: This paper presents a process that has been used by the authors to identify key technological threats and opportunities facing the UK aerospace industry. A group of experts, all of them members of the UK's National Advisory Committee for Aerospace Manufacturing (NACAM), selected six technology themes that were considered to be emerging/growing and would have an impact on aerospace manufacturing technologies. This study included benchmarking and foresight exercises. Based on the results of this study, a bibliometric approach has been used to examine the prioritisation of the selected technologies. The results indicate that most of the technologies ranked highly by the experts have proved to be emerging and of importance according publication and patents, with some exceptions. Overall, the consensus between the NACAM experts, patents and publications perspectives implies a high degree of confidence in the results.

Keywords: technology foresight; TW: technology watch: emerging technologies; bibliomerric; NACAM.

Reference to this paper should be made as follows: Arman, H., Hodgson, A. and Gindy, N. (2009) 'Technologies watch exercise: foresight approach enhanced with scientific publications and patents analysis', *lilt. J. Technology Intelligence and Planning,* Vol. 5, No.3, pp.305-32J.