RICHARD BALL Curriculum Vitae

1. SUMMARY

Career	 Current Managing Director, Keston Technologies Ltd. Managing Director, MCPA Software Ltd. Director, Keston Economics Pty Ltd. 	UK UK Australia	
	 Previous Chief Executive, National Metals Technology Centre Ltd. Vice President, Business Development, UES Software, Inc. Director, Atticus Digital Ltd. Director, AQ2 Ltd. Director, Marketing and Sales, AEA Technology Nuclear Science Executive and non-executive Director, Forensic Alliance Ltd. North America Market Manager, AEA Technology, Inc. 	UK USA/UK UK Australia UK UK USA	
Qualifications	 MBA, Warwick Business School (with distinction) DPhil, Computational Chemistry, University of Oxford MA, University of Oxford, BA (Hons) (First Class), Chemistry, University Fellow of the Royal Society of Chemistry (FRSC) 	nistry, University of Oxford BA (Hons) (First Class), Chemistry, University of Oxford	

2. HIGHLIGHTS

An experienced consultant in innovation, commercialisation, regional development and economic and business strategy, across Europe and Australia, with a portfolio of projects in:

- Strategic studies in regional and economic development.
- Development of innovation-related initiatives, including Centres of Excellence and Clusters.
- Exploitation and commercialisation of research.
- Evaluation and monitoring of innovation and R&D projects and programs.
- Economic analyses, feasibility studies and business cases.
- International business development and strategy, in Australasia, Europe, North America.

Based on:

- A thorough understanding of the requirements for robust economic analyses, needs assessments and feasibility studies, informing well-argued studies and business cases.
- An in-depth knowledge of regional development priorities and needs.
- Many years of experience in the monitoring and evaluation of research projects and programs.
- Report writing, including clearly articulated strategies and recommendations for implementation.
- Robust stakeholder analysis and consultation tools founded on robust social research principles.
- Working with a wide range of organisations across academia, industry and government.

3. CAREER HISTORY

Current

July 2004Managing Director, Keston Technologies Ltd.- presentDirector, Keston Economics Pty Ltd.

Keston Technologies is a dynamic consulting company specialising in regional development, innovation, R&D project and program management and strategy development. Since its establishment in 2004, the company has secured and delivered and delivered projects from a number of clients based in Australia or Europe, often in partnership with other organisations. As Principal of Keston Technologies, responsible for delivering all consulting activities and developing the business. Over recent years, completed projects include:

Strategic studies and the development of innovation-related activities and initiatives:

- (2019): Strategic Economic Development Analysis for the Great Southern, WA.
- (2012-2013): Analysis into successful innovation in regional Western Australia.
- (2004-2010): Development of plans for **Centres of Excellence** in low carbon technologies, intelligent transport systems in the UK.
- (2013): Feasibility study into the establishment of collaborative multi-disciplinary research facilities focused on tropical science in the Kimberley region of WA.
- (2009): Development of an Advanced Materials Solutions Innovation Network, UK.
- (2012): Development of a **Regional Economic Development Strategy** for a regional development agency.
- (2011): Development of a strategic plan for a regional campus for the University of Western Australia (UWA).
- (2007-2008): Design and delivery of a regional innovation programme for small knowledge-based businesses.

The monitoring and evaluation of innovation and R&D projects and programmes:

- (2012-present): Monitoring Officer for the UK Government's Innovate UK for innovation development projects in the UK.
- (2018-present): **Observer** reviewing past evaluation processes and providing recommendations on improvement for future EC FTI Programmes.
- (2015-2019): Independent Review of the Technology Developer Accelerator Programme
- (2012- present): **Project Technical Advisor** (PTA) for the European Commission (EC) on eight multi-national, multi-partner collaborative R&D projects.
- (2013 and 2014): International Expert for the Interim Evaluation of Research and Development for Innovation projects for the Czech Ministry of Education.
- (2005-2011): Independent Evaluator for the Great Southern Development Commission (Australia) for a Regional Grants Scheme.
- (2008-2014): Evaluator for the EC and TSB (UK) for collaborative R&D projects.
- (2009-2010): Member of the International Panel of Experts for the Czech Ministry of Education for assessing and recommending proposals R&D for.
- (2007-2012): Monitoring Officer for the Department of Trade and Industry (DTI), latterly the TSB, for Micro and Nano-Technologies Capital Facility projects.

Economic analyses, feasibility studies and business cases:

- Economic analyses and business case developments, including cost-benefit analyses, for a range of community and economic development projects, including:
 - $\circ~$ Expansion of export-related infrastructure,
 - o Environmental remediation solutions in the Wheatbelt,
 - o Sports and recreation developments for local government authorities,
- Feasibility studies for:
 - Vocational education and training initiatives ,
 - o Malting Plant development, livestock saleyards and university facilities,
 - Various community and sport and recreation feasibility studies.

Other current Managing Director, MCPA Software Ltd. positions

PreviousApril 2002Chief Executive Officer- July 2004National Metals Technology Centre Ltd.

The National Metals Technology Centre (NAMTEC) was formed in April 2002 as a centre of excellence, focusing metals activity in the UK to strategically position the industry to be more competitive in international markets. From its formation, NAMTEC became a high profile organisation with a number of services, including:

- Strategic oversight of the metals sector on behalf of the UK government,
- Provision of metals-related information,
- Technical advice and signposting for industry companies, and
- Management of national and European research and development (R&D) projects.

NAMTEC was a not-for-profit company, with several years of funding secured from public and European sources but with growing sales from the private sector to enable it to be financially self-sufficient. Starting from scratch, NAMTEC grew to employing 20 staff working on a diverse range of project activities.

As founding Chief Executive Officer, responsible for all aspects of establishing the organisation from start-up to delivering high quality, high value, knowledge-based services to the industry. This included developing the vision and strategy for NAMTEC, securing funding for its operations, building the staff and other resources, establishing alliances and joint ventures and building confidence in the organisation from all key stakeholder groups.

- Secured £6m cash of initial funding for NAMTEC from government sources,
- Secured further £20m of funding for R&D projects that NAMTEC managed,
- Established revenue generating services to secure private sector income,
- Negotiated and implemented alliances and joint ventures for services,
- Recruited and developed management team and other staff,
- Successfully positioned NAMTEC at the hub of the UK metals technology network, interacting at all levels in industry, academia and the government,
- Awarded Customer First and Investors in People accreditation.

June 2000Vice President, Business Development- June '02UES Software, Inc.

UES Software, Inc. was a private USA-based company specialising in software tools for materials development and processing. With a small core staff of around 25, UES Software worked through a network of distributors to deliver its products to markets in Europe, Asia and North America.

Reporting to the President of the company, responsible for business development in the company, focusing on strategic partnerships, technology, and the development of corporate strategy and its implementation. In addition, profit and loss responsibility for one division of the company, delivering through a team distributed in the UK, USA and Japan.

- Successfully managed the integration of a newly acquired division into the company,
- Established new distribution channels for products in Japan,
- Created and launched new product offerings to meet market demand.

May 1999Corporate Development- July '00AEA Technology plc.

AEA Technology plc was Britain's largest science and engineering services business with a turnover exceeding £350m p.a. and employing over 4,500 staff. AEA Technology sought to be

recognised as the world's most successful innovation business.

Reporting to the Deputy Chief Executive and the Director of Strategy, responsible for managing several merger/acquisition/divestment projects.

- Chairman of implementation team overseeing a major merger, creating a new company with a turnover of £150m p.a. and employing 1,400 people,
- Managed the separation of a UK software division for a global merger,
- Successfully managed the due diligence process for acquiring a rail technology business in the Netherlands,
- Established the AEA Technology Centre for Advanced Materials, in conjunction with the University of Oxford, becoming the first Director,

Member of the Science and Engineering Advisory Committee, a sub-committee of the AEA Technology Board.

Oct. 1997Director, Marketing and Sales- April '99AEA Technology Nuclear Science

AEA Technology Nuclear Science was one of ten semiautonomous operating businesses of AEA Technology plc. The business had a turnover in excess of £40m p.a. and provided specialist nuclear products and services to customers world-wide, across the private, government and public sectors.

Board Member responsible for the Marketing & Sales function of AEA Technology Nuclear Science business, controlling a budget of ca. £2m and 30 staff located on multiple sites across the UK and North America. Fully accountable for turnover targets for the business and future growth.

- Provided leadership and direction to staff,
- Drove the development of strategy and its implementation product planning, key account management, customer satisfaction management, marketing communications,
- Developed sales systems and processes,
- Exceeded orders targets of £42m p.a.

Oct. 1997Executive & Non-Executive Director- April '00Forensic Alliance Ltd. (FAL)

Forensic Alliance Ltd. was a 55%-owned subsidiary of AEA Technology plc. It was the first fullblown competition to the Forensic Science Service, providing a full range of forensic services to police forces. Since its establishment, the company has grown rapidly, winning a substantial market share, and within four years had a turnover exceeding £7m p.a. and has since grown to over £20m p.a. turnover.

Member of the Board of Forensic Alliance, over-seeing the development and structured growth of the company.

- Member of the original team negotiating the JV and establishing FAL,
- Full involvement in business planning, recruitment of staff and set-up of the business.

April 1995North America Market Manager, Materials & Chemistry- Sep. 1997AEA Technology, Inc. (Pittsburgh, USA)

Based in Pittsburgh, USA, responsible for establishing a new product range in North America comprising software products and services for a range of applications. Revenue from the product range grew at a rate in excess of 40% year-on-year, exceeding business plan targets.

- Building relationships with key customers,
- Establishing an effective local sales and technical resource base,
- Realignment of the focus of technical staff to respond to customer demand,
- Filling gaps in the product line through distribution agreements with third party suppliers and establishing new product development initiatives.

April 1994	Business Development Manager, General Process Industries	
– March '95	AEA Technology, plc	
June 1988	Technical Manager, Fuel Theoretical Studies	
– March '94	Materials & Chemistry Department, AEA Technology	

4. OTHER ACTIVITIES AND RESPONSIBILITIES

Oct. 1990 – June '95 May 1992 – June '95 & May 2000 – Sep. '02	Lecturer, New College, Oxford Industrial Fellow, Wolfson College, Oxford
June 1992 – Dec. '97	Freelance Technical Author , Gmelin Institut, Germany: Ball, R. G. J. <i>et al., Uranium</i> , Gmelin Handbook of Inorganic Chemistry, 8 th Ed. (1994).
	Ball, R. G. J., <i>Thorium Metal</i> , Gmelin Handbook of Inorganic Chemistry, 8 th Ed. (1997).
June 1993 – June '95 1997-2002	Member of sub-Faculty of Chemistry, University of Oxford Established the AEA Technology Centre for Advanced Materials at Begbroke Science Park, in conjunction with the University of Oxford, becoming the first Director of the Centre
Jan. 1995 – Aug. '95 Jan. 2007 – Sept. 2014	Visiting Research Fellow, Imperial College, London Adjunct Senior Lecturer, University of Western Australia

5. QUALIFICATIONS

MBA	(With Distinction)	Warwick Business School
DPhil	Computational Chemistry	University of Oxford, 1991
MA		University of Oxford, 1991
BA (Hons)	Chemistry (First Class)	University of Oxford, 1988

Fellow of the Royal Society of Chemistry (FRSC)