

Background and Rationale for ORLAU Publishing Ltd

ORLAU Publishing Ltd was established “to support the work of the Orthotic Research & Locomotor Assessment Unit (ORLAU)” as its stated aim. ORLAU is a multidisciplinary team of doctors, physiotherapists, bioengineers, clinical rehabilitation engineers and technicians working in an independent department within a NHS Trust Hospital. It has a number of interrelated functions including:-

- Research and development in the field of walking rehabilitation
- Clinical service in provision of specialist orthoses
- Routine clinical gait assessment service
- Training of professionals in walking rehabilitation and biomechanics

The company takes responsibility for the designs that have been developed, and which are marketed by collaborating companies. This is necessary because the, thankfully, small demand for rehabilitation devices for severely disabled patients makes marketing and manufacture attractive only to small organisations that do not have design insurance cover. There is a widely held professional engineering view that the NHS can not cover the risk. Such small marketing organisations therefore hesitate to become involved, unless formal design responsibility is afforded by some other mechanism. ORLAU Publishing does this, and its independence avoids many of the problems associated with most of the financial mechanisms on which NHS departments rely. The Company has an essentially engineering basis, and the support that it provides is therefore biased to this aspect of ORLAU’s activities.

As the mechanisms for NHS R&D funding have become more diverse the Department of Health has ceased the direct funding of device development that enabled ORLAU to achieve its present pre-eminence. The Company has responded to the new situation by expanding the mechanisms of support. These now include: -

- Financing (often in partnership with other industrial contributors) the development of new ideas through investment as a commercial organisation in Technology Transfer Programmes that generate up to 50% of overall project costs for fully funded R&D by the Unit. In this way financial security for ORLAU is enhanced through the resulting research grant which matches the Companies investment.

- Ad hoc purchases of relevant equipment or facilities that support activity justifiable to the Company and which can not be financed through other funding mechanisms.

Technology Transfer Programmes of the type referred to above are now being increasingly used to finance new engineering developments in ORLAU. In particular the Company has been involved in projects for the following specific programmes: -

- MedLINK
- HTD
- NEAT
- DTI Textiles

It has also provided informal support for a number of other Programmes including: -

EC CRAFT

EC TIDE

Programme rules for some funding mechanisms demand that they are managed by a commercial partner rather than the Research partners. The limited levels of profit generated within the UK Rehabilitation Industry makes them reluctant to take on that role, and their inexperience means they are ill equipped to do that. This is an important and creative role that the Company is particularly equipped to undertake. Company policy is to accept that responsibility, and to participate in the formalised Collaboration Agreement that is now a mandatory requirement of any Technology Transfer contract. The resulting Company share in the generated IP is expected to expand the existing portfolio of assets, products and services.

The unusual nature of the company and the support it provides stems from its wish to react to the endemic problems of the rehabilitation engineering industry. Those involved in the supply of external devices such as orthoses, special seating etc have a small market that has a high social need. Profit margins are low, for a number of reasons, and this (as recognised by the Audit Commission¹), restricts the potential for investment in R&D.

A wider range of activities is undertaken by the company. In particular it provides a range of training and education courses with fundamental teaching of basic principles in biomechanics, structures and materials, and in specific training of the techniques evolved by ORLAU. In this way it has natural links with a number of University departments. It also has excellent links with TWI, the joining industry research organisation, having participated in a number of research activities with them. Less frequent links have also been pursued with RAPRA and PERA.

The burden of technical support has increased with the advent of the EC Medical Devices Directive². Collaborating companies find it difficult to compile a sufficiently comprehensive Technical File to satisfy the requirements of the Directive. The company holds the technical and clinical data to support this activity, and provides appropriate access to this as part of the service.

¹ *Audit Commission (2000). Fully Equipped: the provision of equipment to older or disabled people by the NHS and social services in England and Wales. Audit Commission for Local Authorities and the National Health Service in England and Wales, London. ISBN 1 86240 213 2.*

² *European Council (1993). Council Directive 93/42/EEC concerning medical devices. ISSN 0378-678 L 169 Vol 36.*