BINDT Aerospace Group

Objective 4 Working Document on new technologies

Objective 4 is: "To promote and enable the introduction of **new NDT technologies** by identifying and tackling barriers, and through scientific evaluation, validation and education of manufacturing and maintenance supply chains."

One of the first tasks is to identify the barriers to introduction of new NDT technologies into the aerospace industry. This document aims to capture those issues so that strategies can be established to tackle them.

	Manufacturing	Maintenance
Equipment	Generally well received if enhances throughput rate, reduces NDT time, cost, rejections, repairs or scrapping. Barriers are: • lack of an approved qualification process • absence of a legacy, accepted, min. detectable defect size • absence of, or inadequate scientific analysis of capabilities and limitations. • onerous POD methods that may not be appropriate anyway. • overhead in writing new procedures. Automated analysis and sentencing – how to qualify? Digital Certification?	May be badly received by MRO who are paid by the hour and need to purchase and train on new equipment. Need to find a recommended way of sharing the benefit (profit) of new technology between the OEM, operator and MRO. Barriers are: • lack of an approved qualification process • absence of a legacy, accepted, min. detectable defect size • absence of, or inadequate scientific analysis of capabilities and limitations. • onerous POD methods that may not be appropriate anyway. • overhead in writing new procedures. • lack of understanding of how measurements or hit/miss results feed into structural integrity
Personnel	Level III may be reluctant to put in the effort when (necessarily) outside the production process and not incentivised to find the optimum solution. Barriers are: • lack of knowledge of nominated Level III in new technology • lack of training courses for Nom. Level III to call up to meet EN4179 requirements	NAS410 requirements? 145 requirements? Barriers are: • lack of knowledge in new technology in user organisations and even in certifying authorities • Few experts in new technology • lack of training courses to meet 145 requirements