UPDATING THE NATO RESPIRATOR TRIPTYCH D/103

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The NATO AC/225 Joint Capability Group (JCG) on CBRN Defence has been provided with new guidelines and challenge levels regarding biological threats. These challenge levels were translated into technical values that can be used for protection factor (PF) qualifications of military respirators by manufacturers and maintenance providers. The immediate impact of this PF requirement is that the NATO Respirator Triptych D/103 on performance specifications and test methods for military respirators has to be examined for deficiencies and updated accordingly. A team of experts (ToE) consisting of representatives of seven NATO member countries was formed in 2005 to formulate test methodologies and criteria based on these parameters to ensure that NATO troops are provided with CBRN respiratory protective with the highest PF that can be achieved and measured against these threats. This is a complicated process as every NATO country has adopted different PF measurement methodologies and test medium in the respirator qualification procedures. Without releasing the actual biological challenge numbers and conditions the process by which the ToE accepted and adopted three equivalent approaches for the PF qualification procedure of military respirators based on different test media and sampling methods is described.