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Hamiltonian actions on generalized complex manifolds and the equivariant $\bar{\partial}\partial$-lemma

We first review the definition of Hamiltonian actions on generalized complex manifolds and present some non-trivial examples. Given a Hamiltonian action of a compact Lie group on a generalized complex manifold which satisfies the $\bar{\partial}\partial$-lemma, we show that there is an equivariant version of the $\bar{\partial}\partial$-lemma which is a direct generalization of the equivariant $d_G\delta$-lemma in symplectic geometry.