

Strengthening of the work of the Weather Service through the South African Weather Service Amendment Bill, 2011

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Section 12 of the proposed South African Weather Service Amendment Bill, which inserts a section 30A following section 30 of the principal act, is far too broad and ill-defined in its scope and will, as written, have an overall negative outcome for South Africa. Furthermore it proposes penalties which are completely disproportionate to the offence.

Neither 'severe', nor what constitutes a 'warning' are defined in the Amendment.

The entire field of weather prediction, and the related field of air pollution prediction, is in the midst of rapid technological changes, which have a large impact on the outmoded model of a single, state-run observation and prediction service. The essence of these technological changes is

1. Weather modelling is now undertaken on a global basis, since weather systems have no sharp boundaries. Even SAWS downloads forecasts from the ECMWF model in Europe as a basis for its predictions. That model is one of several equally-credible sources, with slightly different approaches. There is not a clearly 'right' or 'wrong' one except in retrospect. Insisting on a single source, sanctioned by SAWS, denies the possibility of getting several opinions.
2. These models are becoming finer and finer in resolution, and versions are available that can be run locally with modest computational resources. This has opened a path for added-value services, provided by commercial and non-commercial entities other than SAWS. These specialist services are highly beneficial, and competition and innovations should be encouraged.
3. The weather and atmosphere observations on which the forecasts are made are no longer the preserve of national weather services. Many come from satellite systems, not operated by SAWS, and perhaps not even accessed by SAWS. Others come from a dense network of sensors operated by individuals or entities other than SAWS. Already, a large fraction of the weather observations made by entities associated with the South African government - the hydrological network and the agricultural network - are not operated by SAWS. If the privately operated weather stations are added, they vastly outnumber the SAWS system. Why would a forecast based on these observations, and not passing through SAWS, necessarily be of no interest or utility? Why would the limitation of liability proposed in section 10 of the Amendment not equally apply to them?

This Bill, if applied as written, would have the effect of excluding South Africa from being part of this change and all the benefits of better, quicker and cheaper weather services it offers. The worst interpretation is that the Bill seeks to shield SAWS from these changes, entrenching a monopolistic situation.