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Date: 10th January 2012

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

att: Ms Tyhileka Madubela Committee Section Parliament of RSA

Dear Sir/Madam

I would like to put on record our comments on the Weather Service amendment bill both as independent weather providers and professionals in the weather forecasting industry.

Our company Ocean Satellite Imaging Systems (hereafter referred to as OSIS) was established in 1998. Early in year 2000 (Prior to, Act No 8 of 2001 establishing the "South African Weather Service" as a juristic person) OSIS started forecasting services and was one of the first commercial independent weather providers to provide weather forecasts based upon GCM (Global Circulation Models) data provided by Noaa (National Oceanic and Atmospheric Administration – of the United States government. The US National weather service falls within this administration). Twelve years later, OSIS continues to provide professional weather forecasting services in South Africa and over 50 countries worldwide, and while the core business focus is maritime, several weather critical businesses (such as mining and agriculture) use our forecasting services as well.

While OSIS services do in part compete with some of the services provided by SAWS, most of the forecasting services of OSIS are client specific and beyond the normal scope of their services.

The main aspects of the bill do not have any relevance to OSIS, other weather providers or the general public; however Section 30 A, a and c (Offences and Penalties),

"Offences and penalties

30A. (1) No person may—

(a) issue a severe weather or air pollution-related warning without the necessary written permission from the Weather Service;

(c) unlawfully, intentionally or negligently commit any act or omission which detrimentally affects or is likely to detrimentally "

will have far reaching consequences, including some that contravene other laws.

1/ The bill provides no definition of what is deemed to be either a severe weather or air pollution warning.

In terms of a WMO (World Meteorological Organization (part of the UN) workshop in 2004 a weather warning was defined as:

"Dangerous meteorological or hydro-meteorological phenomenon, of varying duration, with risk of causing major damage, serious social disruption and loss of human life, requiring measures for minimizing loss, mitigation and avoidance, and requiring detailed information about the phenomenon (location, area or region affected, time, duration, intensity and evolution) to be distributed as soon as possible to the public and responsible authorities."

The definition is highly qualified in the minutes of the meeting that resulted in this definition.

If the act uses this definition, then only SAWS will be able to provide a forecast outside of calm weather that is legal. Any forecast that specifies dangerous meteorological conditions, such as high seas or gale force winds, (as defined in the public arena such as the Beaufort scale which defines gales etc) could be construed as a weather warning. This would be tantamount to criminalizing the dissemination of common or general knowledge.

- 2/ Most independent weather forecast organizations use the Noaa GFS (Global forecast system) data as their base for their forecasts. The model data is freely available on the internet (by virtue of US freedom of information laws). Furthermore Noaa makes available warning criteria on their website and many organizations including OSIS use these thresholds. In many respects, Section 30A will criminalize the provision of a warning based on freely available information from a reputable source.
- Weather forecasts are available on the internet from many sites and organizations. Some of these simply present the raw Noaa data in a easy to use format while professional organizations such as OSIS, WNI (Weather news international is a large organization listed on the Tokyo stock exchange), AMI (American weather forecasting organization with offices in several countries), Fugro (Part of EADS, European manufacturers of defense equipment) and other organizations run downscaling models and interpret the results for the end user. Forecasts from these organizations are regularly used in South Africa. As the international companies either fall outside of the bills jurisdiction and/or cannot be policed, OSIS and South African organizations will be negatively impacted in having to comply with the legislation. Thus local weather forecast will be disadvantaged in not receiving local knowledge in specialized forecasts.
- 3/ Our experience has shown that the use of internet weather based weather forecasts such as Windguru (www.windguru.com), Windfinder (www.windfinder.com) and Buoyweather (www.buoyweather.com) are the dominant source of weather information in South Africa, this is especially significant to the marine industry where users are quickly able to access accurate and dependable data that has a better temporal and spatial resolution than anything else available in South Africa. This data is commonly used to warn of inclement weather. Outlawing the use of this and criminalizing people from warning mariners and other sea users based on this accurate and dependable data, will lead to a significant increase in dangers to mariners (especially fishermen) and mostly likely

lead to the loss of life.

- Weather monitoring equipment (including weather stations and air quality monitoring equipment) are available off the shelf and are easily set up and monitored by technicians and scientists. Several independently owned networks of both weather stations and air quality stations exist in South Africa. Warning thresholds for measurements from these instruments are public domain and as such cannot be copyrighted or controlled. In layman's terms this is the same as someone not being able to warn another that boiling water is dangerous section 30 of amendment bill aims to do this.
- 5/ WMO treaty requirements are quoted as justification for the drafting of the amendment bill. However, it is loosely interpreted and no mention of Annex III to Resolution 40 (Guidelines for relations between national meteorological or hydrometeorological services (NMSs) and the commercial sector) is made. This section makes recommendations as to working relations between the national forecaster and commercial operations. Quoting section 2;
- "2. The commercial sector is urged to recognize and acknowledge the essential contribution of NMSs and of WMO to the activities of the commercial sector. NMSs and the commercial sector are urged to recognize the interdependence and mutual benefit possible from cooperative interaction;" (NMS, national meteorological or hydrometeorological services)"

Both the Act 8 of 2001 and the amendment bill do not address this requirement and are tantamount to being in breach of this requirement.

- 6/ Relating further to Annex III to Resolution 40, section 4;
- "4. Unless authorized to do so by the relevant Member, commercial sector providers of meteorological services <u>should</u> not publicly issue warnings and forecasts relevant to the safety of life and property in the country or maritime area where they operate. Warnings and forecasts relevant to the safety of life and property publicly issued by the commercial sector should be consistent with those originated by <u>NMSs</u> or by other official originators in the course of the performance of their public service responsibilities;"

This section does not promote the criminalization of the issuing of warnings by the private sector but simply discourages them.

Furthermore it offers guidelines as to how warnings should be issued by the private sector should they deem it necessary to do so.

The excessively robust interpretation of this section of the original treaty raises concern by the independent providers as to the goodwill in the act.

- 7/ Relating further to Annex III to Resolution 40, section 7 and 8;
- "7. NMSs are encouraged to discuss with their countries' meteorological community and professional societies the issues associated with the international activities of the commercial sector;
- 8. NMSs are encouraged to collaborate with their countries' commercial sector and their professional societies to maximize the use of meteorological information within their country."

While SAWS are undoubtedly aware of OSIS existence as several of my colleagues who studied at university with me, work there, we collaborated with the marine section up to approximately 2006 and we advertise in trade journals, they have not acted in terms of section 7 and 8 in last few years. In fact, SAWS had to have been involved during the drafting phase of this bill but they did not consult with any of the affected parties during this process.

- SAWS have a dual role in providing government subsidized public interest services as well as paid for commercial services. The requirement that independent weather providers seek permission from SAWS to issue a weather related warning is uncompetitive and potentially monopolistic. It is the same as one retailer asking another retailer for permission to have a sale!
- 9/ In terms of the Merchant shipping act and SOLAS requirements (Safety of life at sea), a Master of a vessel is legally bound to give warning of inclement weather. This in terms of the WMO criteria is a warning, and thus would contravene the provisions of the bill.
- The WMO have a severe weather warning page that has been active since 2005; http://severe.worldweather.wmo.int/

The purpose of the site is to disseminate official weather warnings. Should SAWS be serious in their endeavor to provide accurate, dependable and timeous weather warnings, they would contribute to this global collaboration. However, they are not listed as a contributor to the WMO site.

It is our submission that section 30A of the bill, notably, Subsections "a" and "c" are harmful to the safety of the people of South Africa and should not be adopted in the eventual law. The sections have largely been superseded with the advent of internet technology and the implementation of the law would put South African (especially mariners) lives at risk. The subsection is further in contravention of the Merchant Shipping Act and Solas requirements and will lead to the increased risk to shipping and marine activities in South Africa. The implementation of this law will drive business away from South African independent weather providers leading to loss of jobs and an export of skills and technology.

Should a section, such as 30A be implemented to avoid bogus warnings (which are very uncommon), then it must be in accordance with current law and follow closely with the guidelines set out in Annexure III of the WMO guidelines. The bill should also make provisions to enforce SAWS to meet their WMO obligations and act in the spirit of Annexure III, fostering good working relationships with independent weather providers.

Yours Sincerely

Jean Pierre Arabonis