

AGRICULTURE — DOPPLER RADAR

Statement by Minister for Agriculture and Food

HON KEN BASTON (Mining and Pastoral — Minister for Agriculture and Food) [1.07 pm]: Many members will be aware that the radar coverage throughout rural Western Australia is very limited, particularly compared with that of the eastern states. Currently, none of Western Australia's radars have Doppler capability, whereas every other state in Australia has at the very least some Doppler coverage. When we look at the international stage, we can see that Western Australia is a long way behind its competitors with this technology. With 150 Dopplers, the United States has every square kilometre covered twice over. Meanwhile, the entire United Kingdom has a triple layer of Doppler coverage.

Doppler offers a greater level of detail than standard weather radars. They can not only detect the movement of raindrops towards and away from the Doppler, but also give more precise information on wind flows and soil moisture. We all know that Western Australia has variable seasons and that our farmers need every tool in the toolbox to make the most of our limited rainfall and relatively infertile soils. Therefore, not having the precise weather data and forecasting abilities that Doppler provides puts us at a disadvantage that we cannot afford.

Last year I asked my department to commission a report that would outline the costs and benefits of expanding both the mobile phone network and the Doppler radar coverage. This report has since been completed and has delivered some compelling evidence for the installation of Doppler radars and improved mobile phone coverage in Western Australia. The report estimated that three Doppler radars, located at Wubin, Merredin and Lake Grace, would deliver coverage across a large part of the grain belt at a cost of some \$19 million. This takes into account the cost of three radars at \$3.5 million each, as well as annual operating costs for a 20-year period. Significantly, the spend of \$19 million could conservatively deliver benefits to farm businesses worth some \$108 million net value. I stress that that is a conservative estimate, which, given the speed of technological increases and the rate at which farmers are taking them up, is likely to be much greater. If only the top 25 per cent of our farm businesses are able to use Doppler information to identify weather events in individual paddocks and reduce spray duplication, the saving of that alone will be in excess of \$58 million over that 20 years. Of course, Doppler also provides huge benefits to aviation and in forecasting and responding to extreme weather events and emergencies.

The report also found, as I am sure many members already know, that there are significant gaps in mobile phone reception in rural WA, particularly when we move away from towns and on to farms. Farmers today are running sophisticated businesses and, like any business, they need reliable access to the internet and mobile phone coverage. Without this coverage, farmers are unable to sell their grain when there is a spike in the market, use some of the features on their farm machinery or even communicate with their work colleagues, suppliers and customers, and this is without mentioning the safety aspects of having little or no mobile phone coverage. In regional and remote Western Australia there are eight million hectares of broadacre farmland. An additional 122 mobile towers would be needed to cover about 5.6 million hectares of this area. With a cost of \$1 million for each tower plus the maintenance required for 20 years, this brings the total investment required to \$136 million. However, the benefits that extra coverage would bring are likely to return some \$102 million net to the sector. These figures for both Doppler and the mobile phone towers are significant and I intend to pursue funding options for both. I have asked my department to prepare a royalties for regions business case for Doppler radar, which is currently being finalised. A second business case will be developed based on the report's findings on the expanded mobile phone coverage. I will now table the report by the Department of Agriculture and Food titled, "Technology in Agriculture".

[See paper 2707.]