Summary of the consultation risk assessment

What is the proposed Genetically Modified Organism?

• Genetically modified *Aedes aegypti* mosquito

What modification was made?

- Female mosquitoes do not survive
- Mosquitoes glow red in the laboratory under special lights

1. Considered the risk associated with the new proteins produced by the GM mosquito - toxicity to people via a bite

2. Considered the risk associated with the survival of the GM female mosquitoes and increased disease

3. Considered the risk associated with the release of GM males reducing the effectiveness of Wolbachia* infection as a dengue control strategy

*Wolbachia is a common bacteria found in insects, which can reduce the transmission of dengue

Risk assessment concluded that the release of GM mosquitoes posed negligible risks

Some of the reasons include:

- The release only involves GM male mosquitoes which do not bite
- The GM mosquitoes are not toxic to animals or people
- The GM mosquitoes cannot breed with other species of mosquitoes
- No animals or plants rely only on Aedes aegypti for food or pollination
- Aedes aegypti mosquitoes live near people not in the Australian bush

More detail is available in the Risk Assessment and Risk Management Plan published on the OGTR website

Potential risks considered

4. Considered the risk associated with the new proteins produced by the GM mosquito - toxicity to animals eating the GM mosquito

5. Considered the risk associated with the new proteins produced by the GM mosquito - toxicity to animals via a mosquito bite

6. Considered the risk associated with the release of the GM male mosquitoes – impacts on other species