

M. Iqbal Parker Academy of Science of South Africa And University of Cape Town IAP Side Event on 'Implementation in Action: IAP's Experience in Engaging Scientists in Biosecurity' Geneva, 7th December 2017



Applying scientific thinking in the service of society

CONSENSUS REPORT ON The State of Biosafety and Biosecurity in South Africa

FOCUS OF THE CONSENSUS STUDY

- 1. Assessment of existing biosafety and biosecurity legislation and regulations
- 1. Identify strengths, weaknesses and gaps in laws and in their implementation.
- 2. Critical overview of the implementation of biosafety and biosecurity measures in laboratories in South Africa and an assessment of the extent to which laboratory guidelines address dual use concerns.
- Evaluate existing measures and capacity to detect, identify, control and prevent the natural, accidental or deliberate spread of harmful agents.
- 4. Investigate the applicability and balance of relevant ethical principles in the context of biosafety and biosecurity considerations.

REGULATORY FRAMEWORK South African Legislation Related to Biosafety and Biosecurity



The South African Council for the Non-Proliferation of

Key findings

- 1. The South African regulatory framework for biosafety related issues is robust and comprehensive, but there are significant limitations and challenges that should be addressed iro implementation and monitoring of biosecurity measures (without impeding research).
- 2. Categorisation of hazardous pathogens is unclear & sometimes inconsistent.
- 3. Insufficient funding, personnel and facilities with respect to monitoring, quarantine and inspections.
- 4. Limited human resources/expertise to inspect shipments entering and exiting the country.

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Key findings.....2

- 5. Inability to identify a single, comprehensive list of all infectious agents that pose a threat to public health, be it from accidental or deliberate release.
- 6. Responsibilities are divided between several Government departments.
- 7. Need for enhanced cross referencing between all relevant regulators (departments) increasing the efficiency with which these are controlled.

IMPLEMENTATION Biosafety and Biosecurity Practice in South African Academic and Research Facilities

Key findings

Ethics

Researchers do not perceive training and education on basic research ethics – including scientific misconduct – as routine.

Science and policy

Poor communication between policymakers and scientists, resulting in an overall lack of knowledge and training in national and international laws relevant to the life sciences.

Biosafety and Biosecurity

Life scientists are confident in their knowledge of existing regulatory frameworks for laboratory user safety, but less confident/indifferent to requirements in terms of dual use, risk assessment and biosecurity.

CONCLUSIONS

- 1. South Africa has very good experience in responding to infectious disease outbreaks.
- 2. <u>B</u>iosecurity legislation in place (although dispersed), but need to increase awareness on these issues at <u>academic</u> <u>and research institutions</u>....funding agencies to play a role.
- 3. Lack of adequately trained experts to monitor and identify biosecurity risks.
- 4. Absence of reliable surveillance data, especially in the human and plant areas.
- 5. The lack of regular monitoring and inspection of research facilities.
- 6. Notification of human diseases is poorly co-ordinated between national departments, provinces and <u>regions</u>.

