

## INTRODUCTION

The first finding of ash dieback in the natural environment in the UK in 2012 resulted in a major review of plant biosecurity. This led to the publication (Defra, April 2014) of 'Protecting Plant Health-a plant biosecurity strategy for Great Britain' describing plans to further strengthen plant biosecurity and steps to achieve the 2020 vision.

One of the two 'Underpinning Requirements' was to address issues in government, its agencies, industry, NGOs, landowners and the public concerning capability and capacity both in protecting the critical mass of core capability, whilst also creating opportunities for a wider community of plant health professionals. In response to this, Defra and the Government Office of Science commissioned the authors to carry out a review and suggest recommendations to achieve this aim (summarised in Figure 1).

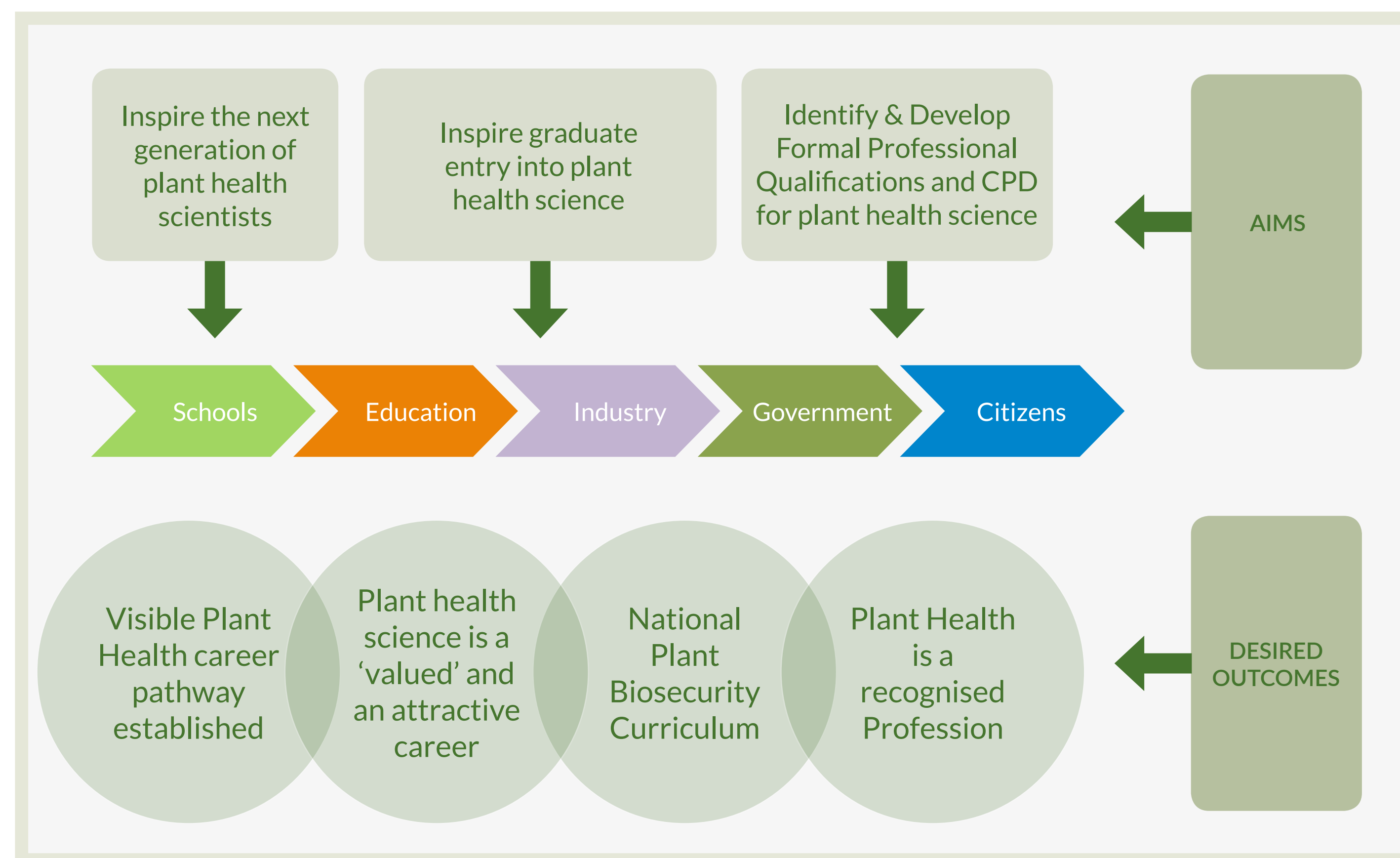


Fig. 1. Plant Health Skills Pipeline

## DEVELOPMENT OF A NEW PLANT HEALTH PROFESSIONALS REGISTER

A key element of this work was the development of the Plant Health Professionals Register managed by the Royal Society Biology.

The basis of the Register was development of a new National Plant Biosecurity Curriculum and competency framework based on the skills requirements articulated in the GB Plant Health Strategy (2014). The competency framework is based on four clusters concerning regulations, responsibilities, risk based decision-making and management (Figure 3).

Applicants may apply at one of three grades- Associate, Registered or Senior level with increasing levels of competency required at each.

Progression through the grades is encouraged as part of continual professional development (CPD) allowing candidates to build their skills in plant health and biosecurity.

A key element of the Royal Society of Biology scheme is the mandatory requirement to demonstrate CPD across a range of skills throughout the year. Applications may be submitted during the year and are reviewed on a quarterly basis by both a primary and secondary assessor appointed by the RSB.

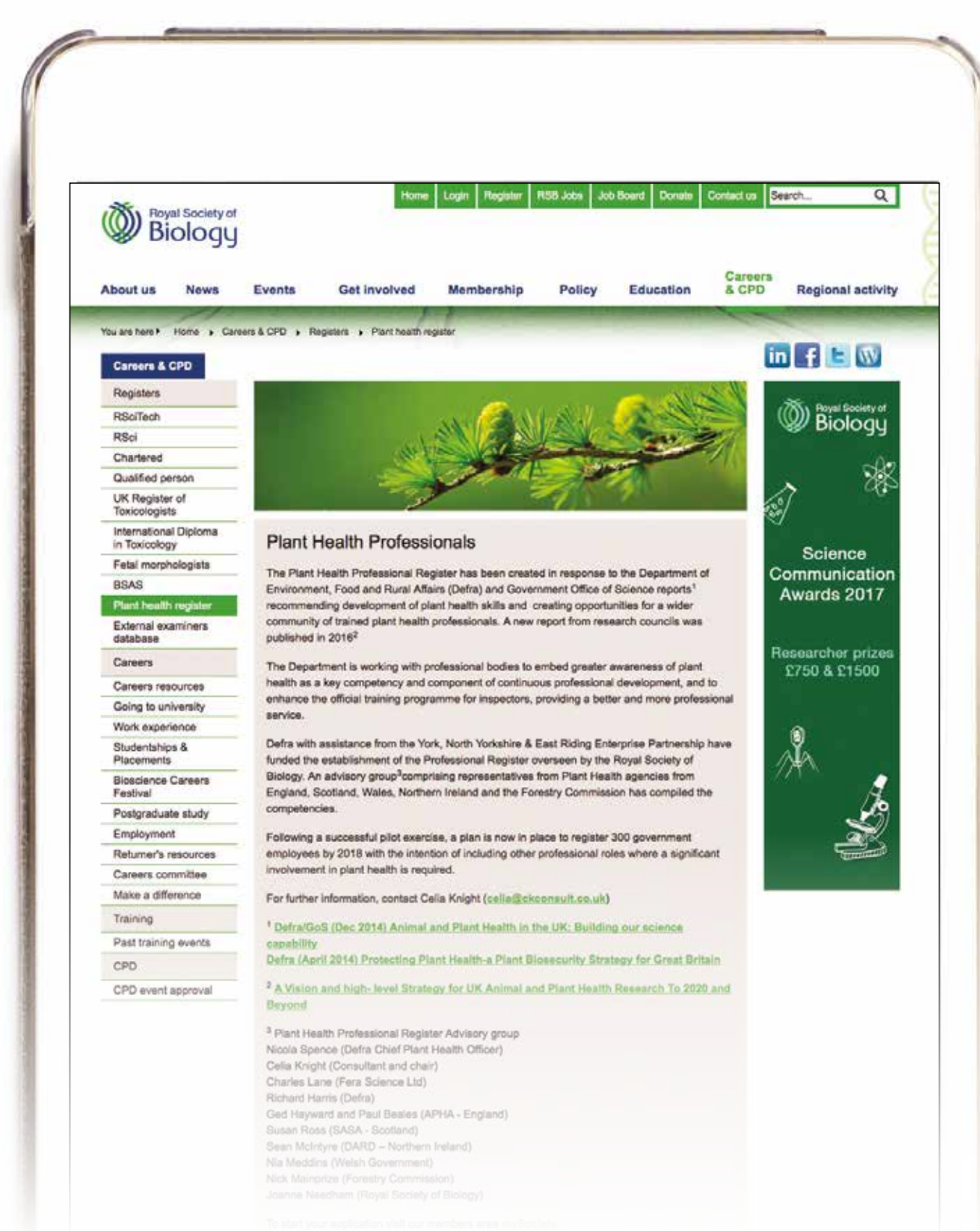


Fig. 2. Royal Society of Biology - Plant Health Professionals Register

Competency Cluster	Elements
Plant Health Regulations	Understanding how plant health services operate in the UK Understanding the significance of international plant health Understanding plant biosecurity continuum
Roles and Responsibilities in Reporting Plant Health Concerns	Demonstrate communication of the risks of plant health policy Understand roles and responsibilities for plant health within your organisation and outside your organisation
Risk Based Decision-Making	Understand risk-based decision-making and identify which pests and diseases are high-risk within your area and to the UK Understand how trade and commodity pathways affect biosecurity and risk mitigation
Contingency Planning and Outbreak Management	Demonstrate knowledge of good biosecurity practice Contingency planning an outbreak management Understand the impact of control strategies measures

Fig. 3. RSB Plant Health Professional Register Competency Framework overview

## OUTCOMES

The first cohort of applicants was registered at Associate, Registered or Senior level in the spring of 2015 with an incremental increase in numbers since then. By the end of 2018 it is expected there will be up to 300 Plant health professionals from government and its agencies registered in the UK. The Plant Health Professionals Register was selected as one of the three finalists in the 2016 Civil Service Awards in the Skills category that recognises 'a collective leadership group that has displayed excellence in promoting skills' (see Figure 4.).



Fig. 4. Prof. Nicola Spence; Defra's Chief Plant Health Officer and RSB Plant health professional applicants and registered professionals

## ACKNOWLEDGEMENTS OR REFERENCES

Nicola Spence (Defra Chief Plant Health Officer), Celia Knight (Consultant; Chair of RSB committee), Charles Lane (Fera Science Ltd; vice-chair), Joanne Needham (Royal Society of Biology), Richard Harris (Defra), Ged Hayward (APHA - England), John Kerr and Gerry Saddler (SASA - Scotland), Sean McIntyre (DARD - Northern Ireland), Nia Meddins (Welsh office) Nick Mainprize (Forestry Commission)