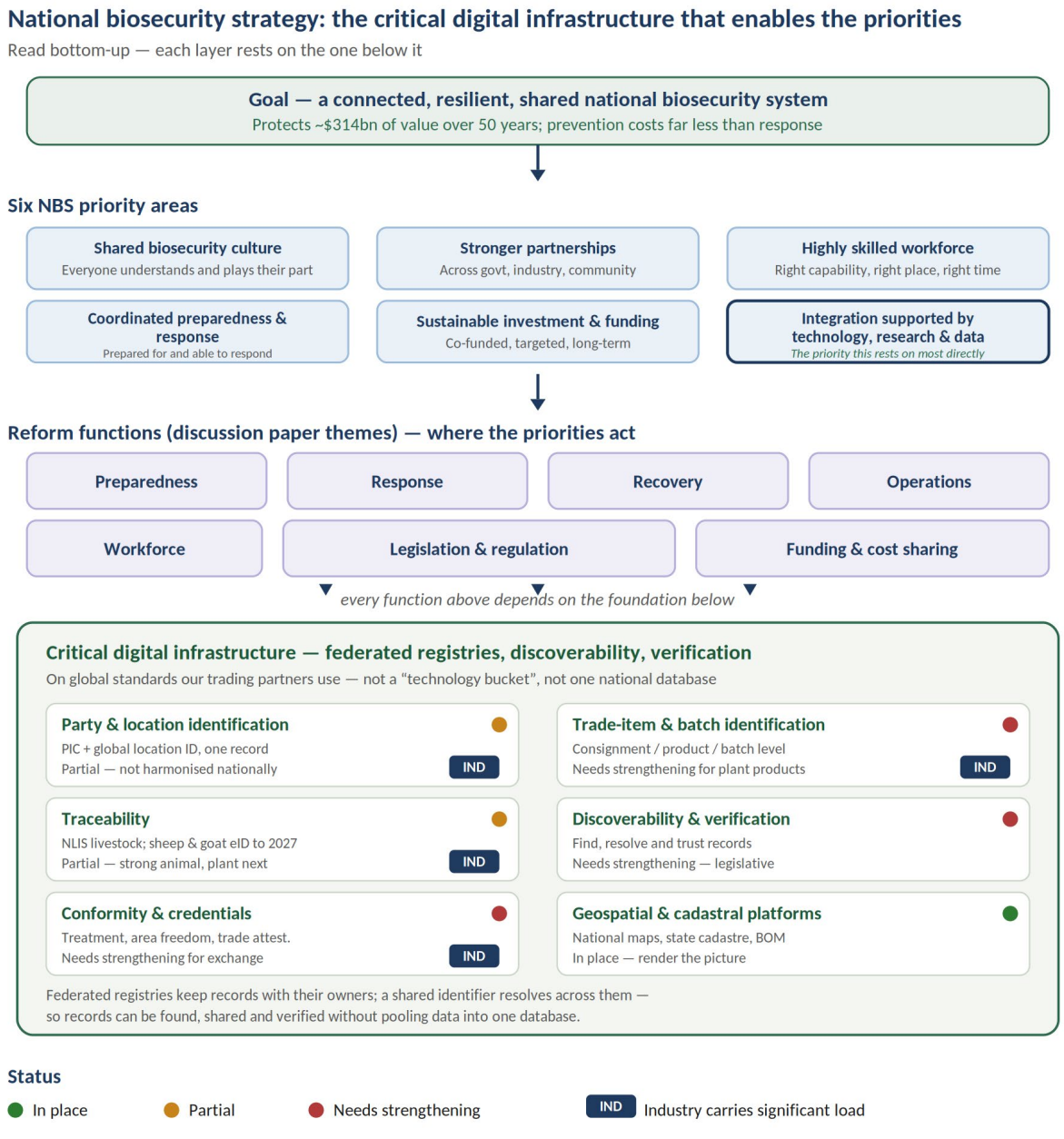
Visualisation - on a page – items for discussion

The critical digital infrastructure that enables Australia's biosecurity priorities

A tabletop discussion item - mapping the National Biosecurity Strategy to the shared infrastructure it depends on

How to read this. The diagram reads bottom-up. The National Biosecurity Strategy goal sits at the top, supported by the six NBS priority areas and the seven reform themes from the discussion paper. Everything above rests on a foundation of critical digital infrastructure - federated registries (each owned by its authority), discoverability and verification, built on global standards. Each foundation capability is marked in place, partial, or needs strengthening, and flagged where industry - producers, supply-chain agents and traders - carries significant load. The status ratings are a considered starting point for discussion, not a final verdict.



Sources: NBS 2022–32; DAFF Biosecurity 2030 Roadmap; national biosecurity reform discussion paper; CEBRA; ABARES; CSIRO.

Talking points for the table

- **The priorities are outcomes; the foundation is what makes them achievable.** Surveillance data sharing, traceability, coordinated response and harmonised regulation all draw on the same capability to identify who, what and where.
- **The gaps cluster in identification and exchange.** Geospatial platforms are in place and livestock traceability is strong - now extending to mandatory sheep and goat eID, on track for full national implementation by 1 January 2027. The weaker areas are national harmonisation of property identification, plant-product and item-level identification, interoperable data sharing, and conformity-credential exchange. That is where the leverage sits.
- **Much of the foundation is industry-operated.** The capabilities marked "IND" are owned and run by producers and supply-chain participants - so strengthening them is a shared endeavour, not a government-only task.
- **Get the foundation right once, reuse it everywhere.** A common identification layer is reused across every theme above it, rather than rebuilt - partially and inconsistently - inside each reform.
- **Treat it as critical digital infrastructure, not a technology bucket.** Framed as "technology and data," this layer looks like tooling each reform buys for itself. It is better understood as shared national infrastructure - federated registries, discoverability and verification on global standards - deserving deliberate investment, governance and resilience, consistent with how Australia already treats data and food-and-grocery capability under the Security of Critical Infrastructure Act 2018.

How this aligns with our submission

This diagram is the visual companion to GS1 Australia's submission and short discussion paper on the reform agenda. The foundation layer shown here is the "enabling infrastructure" the submission argues should be elevated from a sub-task within each theme to a distinct, cross-cutting critical digital infrastructure foundation - sequenced and resourced once, as a foundation, rather than rebuilt inside each reform.

Questions for industry around the table

- Does the bottom-up picture match your experience - are the reforms you care about really resting on this shared foundation?
- Where have inconsistent identification or data requirements across states and sectors created real cost, duplication or delay for your members?
- Do the status ratings (in place / partial / needs strengthening) look right to you, especially for plant products and conformity exchange?
- Which foundation capabilities should be strengthened first, and who is best placed to lead each - government, industry, or jointly?

Sources: National Biosecurity Strategy 2022–32; DAFF Biosecurity 2030 Roadmap; National biosecurity reform agenda discussion paper; CEBRA; ABARES; CSIRO; DAFF Sheep and Goat Traceability Task Force.