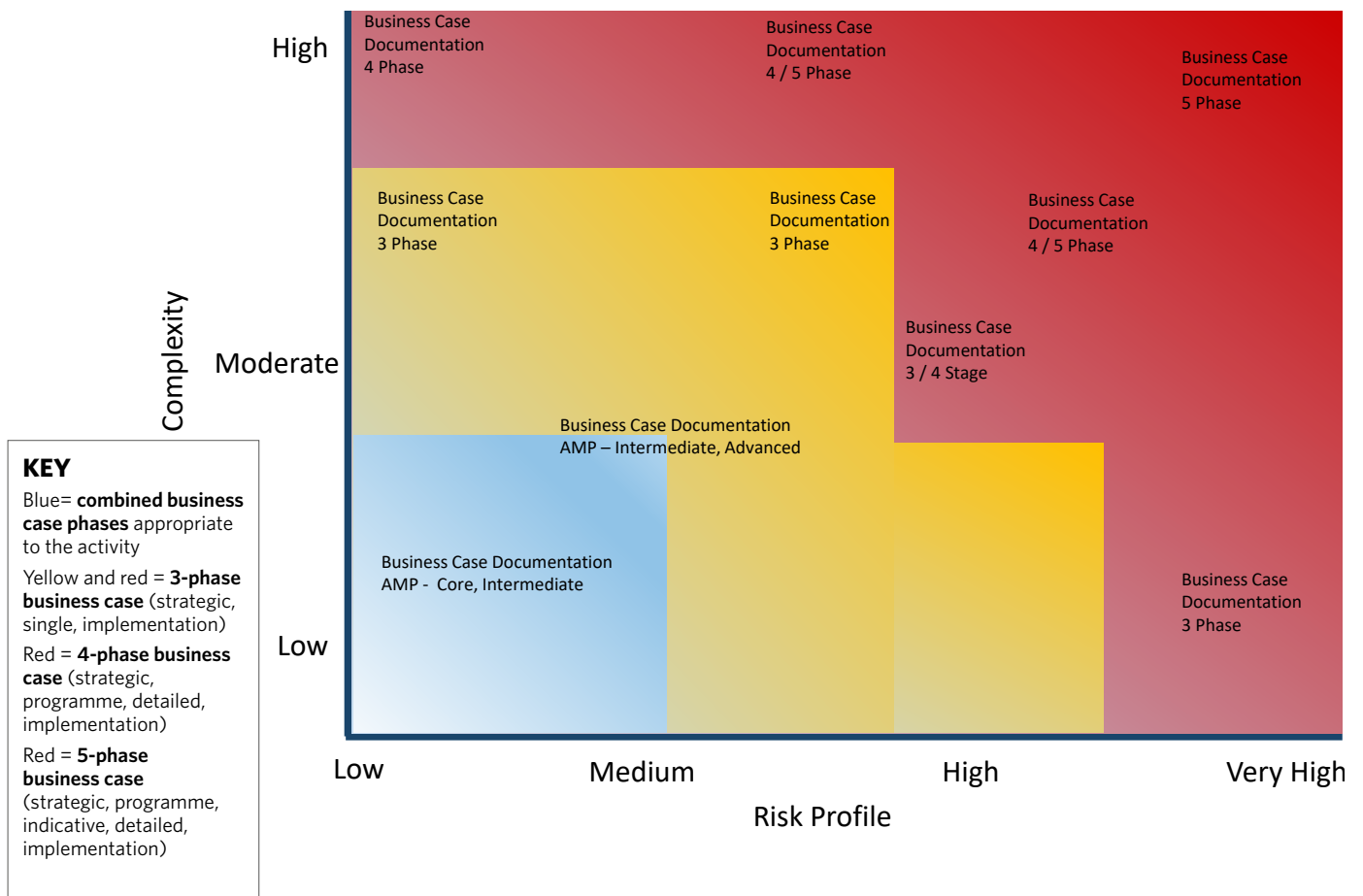


# RISK-BASED APPROACH

The Point of Entry (PoE) guidance outlines how risk and complexity form the major component in right-sizing the scale of the business case required to seek investment funding - and these help in determining the pathway through the investment funding process.

Understanding the complexity of the problem and its implementation options, coupled with documenting risks and uncertainty (using accepted risk management tools) help in right-sizing effort for the business case.

The diagram below illustrates how the business case process sits within the risk and complexity profiles.



The following table provides a range of examples for each classification.

Risk profile		Complexity profile
Risk factors	Uncertainty factors	Complexity factors
Interdependent investments must be delivered on time and to specification	Population growth	Number of parties involved
Consenting process and requirements	Future system-use forecasts	Is proven technology or cutting-edge technology involved
Environmental effects and mitigation requirements	Climate change	Stand-alone issue or wider problem
Technical risks and solutions, eg pavement design		

The level of risk, uncertainty and complexity, together with the completeness of the information (whether qualitative or quantitative) that already exists, must be used to inform decisions about:

- the appropriate starting point for the business case and its likely development pathway
- the scope of the next steps
- the fit-for-purpose effort that is likely to be required.

An example of how to develop a fit-for-purpose business case based on known risk, uncertainty and the completeness of existing information, is shown below.

Example investment scenario	Indicative risk <sup>1</sup> /complexity profile	Indicative prerequisites <sup>2</sup>
Capital improvement where indicated in an Activity Management Plan (or Regional Land Transport Plan, Regional Public Transport Plan or equivalent document)	Low risk and complexity	Existing work demonstrates a clear understanding of the: <ul style="list-style-type: none"> <li>- strategic context and alignment</li> <li>- problems</li> <li>- benefits</li> <li>- investment objectives</li> <li>- consideration of alternatives</li> <li>- consideration of options</li> <li>- sufficient to scope the remaining work.</li> </ul>
	Moderate risk/complexity	Existing work demonstrates a clear understanding of the: <ul style="list-style-type: none"> <li>- strategic context and alignment</li> <li>- problems</li> <li>- benefits</li> <li>- investment objectives</li> <li>- consideration of alternatives.</li> </ul>
	High risk/complexity	Existing work demonstrates a clear understanding of the: <ul style="list-style-type: none"> <li>- strategic context and alignment</li> <li>- overarching problems, but not specific to this investment</li> <li>- overarching benefits, but not specific to this investment</li> <li>- investment objectives.</li> </ul>

With the level of risk and complexity identified at the Point of Entry stage, the pathway through the investment process can be determined using the above risk-complexity matrix as a guide to enable right-sizing the effort to the business case requirements.

<sup>1</sup> Note that for this table, 'risk' is taken to include uncertainty as well. Where risk, uncertainty or complexity are qualitatively assessed as greater than 'low' or 'medium', the next level up should be used to inform PoE.

<sup>2</sup> It is assumed that the prerequisite information will be addressed by the source documents. The PoE phase must consider what gaps exist and how they will be addressed (ie whether that is in the recommended starting phase or whether pre-work or an earlier development phase should be used).