

Life-cycle worksheet prompts

	Phase 1 <i>Preparation</i>	Phase 2 <i>Formation of partnership</i>	Phase 3 <i>Day to day management</i>	Phase 4 <i>Evolution</i>	Phase 5 <i>Conclusion</i>
Key activities	<ul style="list-style-type: none"> What is the <i>collaborative logic</i> for this project? Do you have a conscious strategy of developing competence and capabilities? Does this project fit the strategy? How do you choose which activities to perform in-house? How do you identify suitable partners? How are new products developed in your company? Are system architectures modular or integrated? 	<ul style="list-style-type: none"> Performing a structured selection process Agreeing ground rules Agreeing commercial terms Assigning roles and responsibilities Assigning IPR Defining communication and co-ordination mechanisms 	<ul style="list-style-type: none"> Strong, proactive project management Communicating regularly and openly on progress Identifying and managing risks Committing adequate resources Adopting a flexible approach to deal with unexpected problems Regular exchange of technical data, models, prototypes to confirm progress Face to face meetings in addition to electronic communication 	<ul style="list-style-type: none"> Managing changes in scope & governance etc Dealing with major non-conformities 	<ul style="list-style-type: none"> Dissolving the partnership on good terms as and when appropriate Learning how to do it better next time
Ideally	<ul style="list-style-type: none"> There is a conscious identification of those areas of technological expertise in which investment tends to be concentrated. These are referred to as <i>core technological competences</i> and are actively developed. Processes exist for identifying external sources of expertise and these may be used to gain access to complementary expertise. 	<ul style="list-style-type: none"> Prospective partners are carefully screened to ensure they have adequate capabilities and resources. Personal and cultural dimensions are also considered and care is taken to ensure that the motives and potential rewards for both parties are aligned. A risk assessment is also carried out so that technical and commercial risks can be identified and managed. The roles and responsibilities of both partners are clearly defined and communicated. The 'lead partner' is identified and agreed where appropriate. A contract or agreement is in place (or under construction) which is satisfactory to both parties. IPR issues are clearly defined. Staff at all levels are committed to the partnership, with no trace of NIH. 	<ul style="list-style-type: none"> There is a clear communication route between the partners, which is not overly dependent on key individuals. Communication is open and frequent, within a climate of trust and confidence. Management styles and systems are compatible. Both parties feel they are gaining from the project. Both parties are aware of the increased risks with dealing with a third party and these risks are managed appropriately. 	<ul style="list-style-type: none"> It is accepted that conditions may well change, and that unexpected difficulties may arise. These are handled calmly in a non-adversarial manner. There a sense of investment in the relationship, which will pay dividends over the longer term. 	<ul style="list-style-type: none"> There is a sense of investment in the relationship, which will pay dividends over the longer term. Both partners are consciously learning about the collaborative process with the aim of improving <i>collaborative capabilities</i>. The exit conditions for the current collaboration are clearly defined and understood, but a successful outcome is expected and it is likely that further collaborative projects will be undertaken in the future
Typical problems	<ul style="list-style-type: none"> The NPI process is not well established and does not deal specifically with external partnerships. Core skills and competences are not reviewed systematically, and not linked to training and recruitment policy. External expertise is accessed sporadically Either partner has a 'hidden agenda' (e.g. potential acquisition, or technology transfer) 	<ul style="list-style-type: none"> Insufficient time or resources allocated to partner search and selection, so partner may not actually have all capabilities required An over-formal or rigid selection process may antagonise prospective partners or introduce delays Over-estimating the partner's capability Supplier may use specialist resources to win the business which are not available during the project Poor system design and task partitioning with too many interdependencies leading to problems downstream Difference of expectation over the need for a written contract Incompatibility in communication mechanisms – language, time zone, software tools etc Incompatible NPI process or working practices, cultural differences, formal v informal processes Adversarial approach due to lack of trust, failure to generate a win-win solution. Internal politics, lack of buy-in, NIH, 'them and us', leading to lack of commitment to collaborative project. 	<ul style="list-style-type: none"> Managers responsible for running the project were not involved in the setting up of the collaboration, so some familiarisation or renegotiation is needed. Failure to set sharp milestones makes progress checking difficult Over-dependence on one or two key individuals for either technical or development or information exchange. Becomes apparent if someone is on holiday or leaves the company. Incompatible systems – email systems, document formats, software tools, CAD formats, metric v imperial units, spoken language, time zones, accounting conventions No contingency to deal with unexpected events (which always crop up) The partner has subcontracted some of the work, so the design chain is more complex and less responsive to requests for design changes 	<ul style="list-style-type: none"> It emerges that the capabilities of the partner are not as expected. Some work may need to be taken back in-house or re-sourced. An escalation procedure has not been defined in advance, so a framework for resolving problems has to be negotiated from scratch In a medium or large company, the decision loops may be longer (and slower) due to the involvement of multiple layers of management than in a smaller company where the same people are involved. 	<ul style="list-style-type: none"> Exit terms weren't negotiated up-front, so there are several loose ends to tidy up, with possible disagreement over final payment Uncertainty over the ownership of joint assets, materials or inventory Support and maintenance agreements not in place – who fixes software bugs, who pays? With a development partner, will there be support available when the product eventually goes into pre-production?