

Central Procurement Directorate
Stiúrthóireacht Lárnach Soláthair



Procurement Guidance Note
PGN 02/17

Innovation in Public Procurement

Issued: 9 March 2017



PROCUREMENT GUIDANCE NOTES

[Northern Ireland Public Procurement Policy \(NIPPP\)](#) was approved by the Northern Ireland Executive in 2002. In approving the policy, the Executive took the decision that legislation was not necessary to ensure that Departments, their Agencies, Non-Departmental Public Bodies and Public Corporations complied with the policy. Instead, it considered that compliance could be achieved by means of administrative direction.

Procurement Guidance Notes (PGNs) are the administrative means by which Departments are advised of procurement policy and best practice developments. They apply to those bodies subject to NIPPP and also provide useful guidance for other public sector bodies.

PGNs are developed by the Central Procurement Directorate (CPD), in consultation with the Centres of Procurement Expertise (CoPEs), and are subject to the approval of the Procurement Board.

Once endorsed by the Procurement Board, they are issued to the Departments for implementation and copied to CoPEs to develop, if necessary, underpinning procedures supporting the implementation of this guidance in their particular sector. PGNs are also published on the [Department of Finance \(DoF\) website](#).

The following PGN was endorsed by the Procurement Board with effect from 9 March 2017 for use by those bodies subject to NIPPP.

Revision History

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CONTENTS

1	Purpose.....	4
2	Background.....	4
3	Why is Innovation in Public Procurement Important?	5
4	Considerations When Encouraging Innovation.....	6
5	Market Engagement.....	8
6	Procurement Options.....	10
7	Economic Appraisal and Business Case.....	12
8	Other Guidance.....	13
9	Further Information.....	14

Annexes

Annex A - Methods of engagement with the market.....	15
Annex B - Procurement procedures and models.....	16

Definition of Terminology

In the preparation of this guide, the term **contractor/supplier** has been used to denote an organisation that contracts directly with a Department, whether it is a supplier, a service provider or a construction contractor.

The term **Department** has been used to refer to those bodies subject to Northern Ireland Public Procurement Policy including Departments, Non-Departmental Public Bodies and Public Corporations. A full list of such bodies is available in Annex A of the [Northern Ireland Public Procurement Policy \(NIPPP\)](#).

1 PURPOSE

- 1.1 The purpose of this guidance is to set out when and how public procurement can be used to encourage the development of innovative solutions to deliver better outcomes and meet the needs of the public sector while operating within the framework that governs public sector procurement. This framework comprises the European Union (EU) Treaty, the EU Procurement Directives, the [Public Contracts Regulations 2015](#) (PCR) and the [Utilities Contracts Regulations 2016](#) (UCR) implementing the Directives and the [Northern Ireland Public Procurement Policy](#) (NIPPP) based on achieving best value for money.

2 BACKGROUND

- 2.1 Innovation is widely accepted as key to driving efficiency and improving processes in any marketplace. Indeed the EU has given it particular focus and developed the [Horizon 2020](#) initiative within its Europe 2020 programme. Horizon 2020 is the biggest EU Research and Innovation programme ever with nearly €80 billion of funding available over 7 years (2014 to 2020).
- 2.2 The NI Executive has placed innovation at the core of its drive to rebalance the NI economy. The NICS Board mandates that “like for like” procurements cannot be the default position and that business change should be implemented where this will lead to efficiency or cash releasing savings.
- 2.3 Public sector procurement can contribute to this and help deliver best value by seeking innovative products and services for the public sector. This applies to NI companies and industries of every size in every sector, including SMEs, which provide much of the NI entrepreneurial base.
- 2.4 Northern Ireland Departments and their arm’s length bodies spend some £2.7 billion per annum on the procurement of goods, services and works. The public sector can play an important role in incentivising innovation. Directing even a small proportion of the annual spend towards innovative procurement programmes will help stimulate innovation in the economy by accelerating

ideas, products and services through from businesses, aside from the direct advantage to Government of more efficient and effective products, services and buildings.

- 2.5 Achieving best value for money is fundamental to NIPPP and is defined as “the most advantageous combination of cost, quality and sustainability to meet customer requirements”.
- 2.6 At the outset of any project the public sector first needs to think “how can we do this better?” rather than using the same approach as before because “we have always done it this way”. Procuring innovative solutions should be seen as an alternative to repeat contracts, where to do so will achieve best value for money.

3 WHY IS INNOVATION IN PUBLIC PROCUREMENT IMPORTANT?

- 3.1 Innovation can be defined as “the implementation of a new or significantly improved public service/organisational practice/construction process”. Innovation in public procurement generally refers to innovative solutions in the design and delivery of public services, the procurement of innovative products and services and innovative procurement processes and models. The improvement may be existing ideas new to the recipient or may be completely new. An innovative approach to the procurement process can:

- encourage better solutions at better prices;
- stimulate a more competitive procurement environment; and
- develop new services and products to meet previously unmet needs.

- 3.2 Innovation in public procurement can come in two forms:

- The innovative procurement process used to acquire the supplies, services or works; and
- The intrinsic innovative nature of the supplies, services and works acquired.

The two are not mutually exclusive; in fact, the use of an innovative procurement process can often lead to an innovative solution.

- 3.3 An innovative procurement process involves procuring supplies, services and works in a way that is new. For example, the PCR (Reg 31) and UCR (Reg 49) make provision for a new process called an “Innovation Partnership” (see section 6) and greater market engagement (see section 5).
- 3.4 The procurement of solutions to requirements that are innovative by their nature is another method of delivering value to the public sector. For example, the use of outcome based specifications that allow for differing approaches from suppliers when proposing a solution to achieve a project’s core objective (see section 6).
- 3.5 What is clear for commissioning Departments is the importance of engaging with a CoPE and the market at the earliest possible opportunity. Experience shows that not engaging with the market represents a missed opportunity to assess the potential of that market and the levels of innovation it can exploit. This also increases the risk of missing out on the innovative solutions available.

4 CONSIDERATIONS WHEN ENCOURAGING INNOVATION

- 4.1 Before starting any procurement project both commissioners and procurement practitioners need to consider a number of points to ensure innovation is encouraged and not stifled at any stage of the process.

Commissioners should consider:

- Engaging with a CoPE at the earliest opportunity
- Are the project timescales realistic – to allow for development of business case that includes market engagement and the resulting procurement method?
- What information needs to be gathered from market engagement and what is the best way to engage with the market? (see section 5) – looking at the feasibility, capability, maturity and capacity of the market as a whole. How has the market reacted to the outline requirement and is it viable? Are there existing innovative solutions within the market ready to meet the need the commissioner is unaware of?
- Does the requirement encourage competition and innovation? – the requirement should be informed by market engagement in such a way that it does not restrict the market. Use outcome based specifications (see section 6.5).
- What innovations and new opportunities or technologies may emerge during the life of the contract and offer a better service or lower costs. How will the contract need to flex to accommodate such change?

Procurement practitioners should consider:

- The best method of market engagement ensuring that it is conducted in an open and transparent manner (see section 5). This should identify what is possible and also give the market sufficient warning.
- In the case of goods consider full life-cycle costs
- Developing a requirement that allows for competition and innovative solutions – the requirement should be shaped by market engagement but not be unduly influenced by it. There is a real risk that the requirement could be shaped in such a way that discourages innovation. Use outcome based specification (see section 6.5).
- Encourage the participation of SMEs – select appropriate criteria to assess potential solutions and consider splitting larger tenders into lots to make contracts manageable.
- Selecting the most appropriate procurement method to get the best solution on offer (see section 6) and include appropriate degree of collaboration with the commissioner.
- Contract management procedures – establish a contract that encourages innovation throughout the life of the contract and allows the commissioner to exploit it.

5 MARKET ENGAGEMENT

5.1 Early engagement with the market, good communication and, where appropriate, the use of the procurement models specifically designed to facilitate innovative procurement can greatly reduce the risk associated with innovative procurement.

5.2 Innovation from suppliers should be encouraged throughout the procurement process and contract lifecycle. The PCR (Reg 72) and UCR (Reg 88) are clear in that they allow contracts to be modified without a new

procedure given that certain circumstances are satisfied. The contract however must contain an unequivocal clause that allows for such modifications during its duration. However the greatest potential for innovation arises at the pre-market phase of the procurement process:

- when policy is being formulated;
- when programmes and projects are being shaped; and
- when the procurement strategy is being established.

5.3 Market engagement can lead to greater SME participation in public procurement, widen competition and improve value for money. It also helps to provide a better understanding of the feasibility of the requirement, the best approach, the capacity of the market to deliver and possible risks involved. It encourages a more responsive market and allows suppliers to ask questions/raise queries at an early stage encouraging the market to develop, or offer existing solutions for goods, services and works that are innovative to the public sector.

5.4 When engaging with the market it is important that certain principles be observed. The principles that must be upheld are:

- maintaining the commercial confidentiality of information received during discussions with potential suppliers in line with applicable laws, such as the Freedom of Information Act;
- not giving any one potential supplier an advantage in bidding over another – for example, by providing one supplier with substantially more information than another;
- not, as a result of pre-procurement dialogue, shaping the requirement in favour of any one particular potential supplier;
- not engaging in a way that disadvantages any one particular potential supplier or group of potential suppliers – for example, SMEs and mutuals; and
- ensuring that suppliers are aware that any resulting procurement will be conducted competitively.

5.5 The PCR and UCR explicitly allow contracting authorities to enter into discussions with suppliers and expert bodies prior to starting a procurement procedure both to inform suppliers and to allow authorities to seek advice in the planning and conduct of the procurement procedure. Care must, however, be taken to ensure such contact does not distort competition or violate the transparency and non-discrimination principles of the EU. A number of methods of market engagement are described in [Annex A](#).

6 PROCUREMENT OPTIONS

6.1 While there is potential for innovation in every model of procurement, the PCR includes two new procedures - “Innovation partnership” and the “Competitive procedure with negotiation” (the latter replacing the “negotiated procedure with prior publication of a contract notice”) while the UCR includes the “Innovation partnership” and retains the negotiated procedure with prior call for competition. These are specifically aimed at helping to promote and facilitate more innovation in public procurement. Further detail is set out in [Annex B](#).

6.2 Two other procurement models are currently available to the public sector under EU and UK legislation. These models have also been endorsed by the Procurement Board for use in NI. The two models are:

- **Pre-Commercial Procurement (PCP):** involves the procurement of Research and Development (R&D) services leading to the development of products or solutions to address policy or service needs.; and
- **Forward Commitment Procurement:** involves providing the market with advance information of future needs in outcome terms, early engagement with potential suppliers and - most importantly - the incentive of a Forward Commitment (an agreement to purchase a product or service that currently does not exist, at a specified future date, providing it can be delivered to agreed performance levels and costs).

6.3 Further information on these models is set out in [Annex B](#).

6.4 Small Business Research Initiative

- 6.4.1 Innovate UK's Small Business Research Initiative (SBRI) has been used successfully to drive innovation through pre-commercial procurement of R&D. This is a programme which uses the UK Government's interpretation of the pre-commercial procurement model to run open competitions for government to find innovative solutions to public sector problems. More detail on the SBRI is set out in [Annex B](#).
- 6.4.2 SBRI has proven to be an effective method of incentivising new and innovative solutions for the public sector. As part of the 2016/17 budget, the Executive allocated £1.1m to a pilot SBRI Challenge Fund to encourage take up of SBRI by Northern Ireland Departments. Five projects were successful in applying for funding and include a project to enable effective administration of medicines in service users' homes assisted by domiciliary care workers, an automated solution to the deployment of pharmacy staff and real-time tourism information.

6.5 Use of outcome based specifications

- 6.5.1 Outcome based specifications consider a project's core objective and what it is expected to deliver. It should be based on what we want to achieve and not how a supplier is to provide it. This approach means there is a focus on the desired outcomes that are required from goods and services rather than on a narrow technical specification.

For example, a need to supply and install XXX light bulbs of XXX Watts, and XXX light fixtures in a school. An outcome based specification could ask that classrooms need to be lit to XX quality for XX hours per day, corridors need to be lit to YY quality for YY hours per day and the electricity consumption of the lighting system installed must be XX% lower than the current system.

- 6.5.2 The [Northern Ireland Guide to Expenditure Appraisal and Evaluation](#) (NIGEAE) defines outcomes as: "*The eventual benefits to society that proposals are intended to achieve*". This is distinct from outputs which are defined as: "*The results of activities that can be clearly stated or measured and which relate in some way to the outcomes desired*".

6.5.3 One of the main benefits of an outcomes based specification is that it challenges suppliers to ensure that they meet overall policy core objectives. There is also greater potential for an innovative solution when commissioners specify what they want in terms of outputs or outcomes.

6.5.4 An effective outcome based specification should:

- be non prescriptive, clear, concise and unambiguous and identify all aspects of the service that are critical to the authority;
- define the outcomes that the contracting authority requires from the successful service provider over the term of the contract but not how those outcomes are to be achieved; and
- where appropriate, be used by contracting authorities when they are using the open or restricted procedure.

6.6 Open procedure

6.6.1 After completing initial market engagement, if a contracting authority is aware that the market can provide a solution to meet its needs the contracting authority may decide to proceed with an open procurement procedure that allows for innovative solutions.

6.6.2 The choice of which procurement route to follow will depend on the requirements of the contracting authority though the opportunity to include innovation in the contract should be identified at the earliest possible stage. This will ensure that the business case and procurement strategy are developed to maximise the benefits to be delivered by the contract.

7 ECONOMIC APPRAISAL AND BUSINESS CASE

7.1 A CoPE should be consulted at the strategic option phase of the process to explore the potential to use market engagement so that consideration is given to a range of solutions available pre-procurement. This will allow any interaction with the market to exert fully a positive influence on the procurement process that follows, thus enhancing the prospects for achieving value for money. Early consultation is good practice for procurement projects

generally but it is particularly important to consult the relevant CoPE at Strategic Outline Case (SOC) stage in the development of major projects as defined in para 8.5.3 of the NIGEAE [Business Case Development Process](#).

- 7.2 To help ensure best VFM, DoF requires the principles of economic appraisal to be applied, with appropriate and proportionate effort, to all decisions and proposals for spending or saving public money. This includes all procurement projects. A strategic option appraisal conducted in accordance with [NIGEAE](#) is required prior to any assessment of alternative procurement routes, in order that the strategic policy choice and the procurement choice are both explicitly and separately justified at the earliest stages. See the NIGEAE [step by step guidance](#) for details of what is involved in a strategic appraisal.
- 7.3 All contracts, including direct award contracts, all contract extensions and all procurement projects should be supported by suitable appraisals and business cases. See in particular section 8.10 “Business cases for contract awards, contract extensions and procurement projects” within the NIGEAE [Business Case Development Process](#) section. Departmental economists can advise on the principles of appraisals and business cases, and the advice of CPD, or if appropriate, another designated CoPE, must be sought before commencing any procurement.

8 OTHER GUIDANCE

- 8.1 In addition to this PGN there is a range of guidance, available on the [DoF website](#) that the Procurement Board has approved which provides further guidance and support for departments and CoPEs in relation to public procurement.

Northern Ireland Innovation Strategy:

<https://www.economy-ni.gov.uk/articles/northern-ireland-innovation-strategy>

Open policy making:

<https://www.gov.uk/open-policy-making-toolkit>

Guidance on Public Procurement of Innovation (PPI) can be found on the Procurement of Innovation Platform:

https://www.innovation-procurement.org/fileadmin/editor-content/Guides/PPI-Platform_Guide_new-final_download.pdf

9 FURTHER INFORMATION

9.1 Any queries on this guide should be addressed to:

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303 Airport Road West
Belfast, BT3 9ED

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METHODS OF ENGAGEMENT WITH THE MARKET

There are various ways that contracting authorities can engage with the market pre-procurement. These include but are not limited to:

- Market Sounding Exercises – can include the use of questionnaires or consulting with subject matter experts. This can be useful in establishing the feasibility, capability, maturity and capacity of the market as a whole;
- Product exploration – where a contracting authority has an idea of what they want to buy, they can hold a product surgery to allow potential suppliers to present possible solutions. This usually involves engaging directly with suppliers on a one-to-one basis and encourages open discussion;
- Industry Days – to capture potential suppliers' views on requirements, including viability and possible delivery options. This can help to stimulate innovative solutions from a diverse range of potential suppliers. This also provides an opportunity for potential suppliers to discuss opportunities with one another (e.g. partnering arrangements, sub-contracting opportunities etc). However, there are some barriers to this type of event e.g. the disclosure of intellectual property and suppliers' concerns that they may lose a competitive advantage.

PROCUREMENT PROCEDURES AND MODELS

Innovation Partnership

This is a new procedure which has been included in the PCR and UCR. One of the key aims of the new EU Procurement Directives and implementing regulations is to **promote innovation**. 'Innovation' in the new directives means “the implementation of a new or significantly improved good, service or process, including but not limited to production, building or construction processes, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations inter alia with the purpose to help solving societal challenges or to support the Europe 2020 strategy for smart, sustainable and inclusive growth”.

Under the previous Public Sector Directive (2004/18/EC), an exemption existed for the purchase of R&D services (Article 16 (f)). This only applied where the benefit of the services was not limited to the contracting authority's own operations. Outside of the full application of the Directives, there was greater scope to engage with service providers to develop their ideas. It was not however generally possible to proceed directly from the R&D phase to commercial procurement without a separate competition.

Reg 31 of the PCR and Reg 49 of the UCR supplement this exemption with an “Innovation Partnership” procedure. This allows for the development and subsequent purchase of new, innovative products, works and services provided they can be delivered to agreed performance levels and costs, however, innovations partnerships are more suitable to products than works.

The procedure to establish an Innovation Partnership, is the "competitive procedure with negotiation" (Reg 29 of the PCR) (see below) which replaces the “negotiated procedure with prior publication of a contract notice”.

The procedure will allow for the development of innovative solutions in a long term partnership between a public body and suppliers. It allows contracting authorities to negotiate for the development and purchase of innovative supplies, services and

works including all the terms of the contract, provided this is done in a way which respects the principle of equal treatment and the confidentiality of proposals.

In the procurement documents, the contracting authority identifies the need for an innovative product, service or works defines the minimum requirements to be met by all tenders and the objective and non-discriminatory criteria they intend to apply. The minimum requirements and award criteria are not subject to negotiations.

In selecting candidates, contracting authorities in particular, apply criteria concerning the candidates' capacity in the field of research and development and of developing and implementing innovative solutions.

Negotiations during innovation partnership procedures may take place in successive stages in order to reduce the number of tenders to be negotiated by applying the award criteria. In the contract notice, the invitation to confirm interest or in the procurement documents, the contracting authority shall clearly indicate whether it will use that option. The minimum number of candidates shall be three.

Contracting Authorities negotiate with tenderers the initial and all subsequent tenders submitted by them except for the final tender.

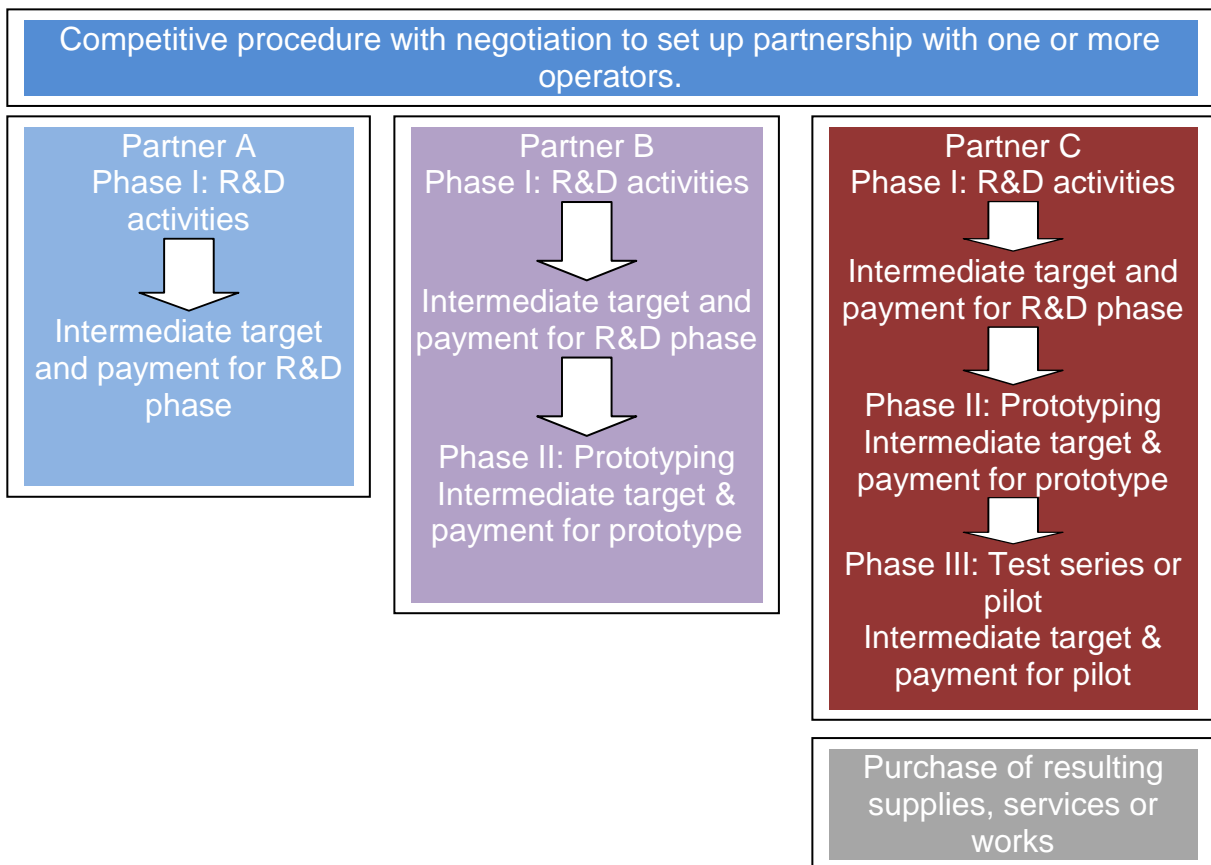
When estimating the value of the procurement, the estimated value of the research and development activities as well as of the supplies, services or works to be developed and procured at the end of the partnership need to be taken into account. Any public funding favouring a particular company or sector could be subject to the EU rules and, in certain circumstances, require notification to the European Commission. SBRI is normally exempt but if you are unsure of the position of any project it is recommended that initial contact on questions regarding State Aid should be made with the Department for the Economy (DfE), State Aid Unit. DfE has a State Aid central awareness generation, co-ordination and advisory role in NI [except in agricultural and transport matters where the Department of Agriculture, Environment and Rural Affairs (DAERA) and the Department for Infrastructure (DfI) take the respective leads]. Where required, departments may seek advice from the Departmental Solicitor's Office.

In the procurement documents, the contracting authority must define the arrangements applicable to intellectual property rights. The diagram below shows one possible format for innovation partnership. It is also possible to establish a partnership with a single operator.

The competitive procedure with negotiation

In the PCR this replaces the negotiated procedure with prior publication of a contract notice (retained in the UCR Reg 47). It allows for the negotiation of all terms of the contract provided this is done in a way which respects the principle of equal treatment and the confidentiality of proposals. It is the procedure used to establish an innovation partnership (see above). The Innovation Partnership itself must be structured in successive stages, allowing for intermediate targets and remuneration of the partner in instalments.

The competitive procedure with negotiation can be used in the same situations as the competitive dialogue procedure, however, unlike the competitive dialogue procedure it requires the contracting authority to specify the required characteristics of the goods or services in advance of the competition.



Pre-Commercial Procurement (PCP)

R&D procurement is excluded from the EU Procurement Directives (unless the benefits of the R&D are exclusively for the contracting authority and the R&D is fully paid for by the contracting authority). PCP deals with the procurement of R&D that falls outside the EU Directives.

A contracting authority can use the pre-commercial procurement model when it is looking to stimulate the market by awarding R&D contracts in order to get solutions from the design stage to the commercialisation stage.

The pre-commercial procurement approach for procuring R&D services enables contracting authorities to:

- Share the risks and benefits of designing, prototyping and testing new products and services with the suppliers, without involving state aid;
- Create the optimum conditions for wide commercialization and take-up of R&D results through standardization and/or publication; and
- Pool the efforts of several procurers.

The main phases of PCP are:

Phase 0: Research

This phase can entail stakeholder engagement, understanding the problem to be solved and setting the brief.

Phase 1: Solution design

An initial feasibility study would explore the concepts submitted and provide confirmation that innovative solutions exist or are possible. At the end of this phase the Contracting Authority may decide to reduce the number of participants.

Phase 2: Prototype Development

The remaining participants would be awarded R&D contracts to prove the solutions or new technologies. The contracting authority may decide, at the end of this phase, to reduce the number of participants further.

Phase 3: Pre-Commercial Development

The remaining participants would be awarded further R&D contracts for the pre-production stage. The objective would be to take the solution to the first batch of pre-commercial products or services. The PCP project may stop here.

Phase 4: Commercialisation of Product

This is the production and supply phase and this must be done using a competitive procurement process under normal EU procurement rules.

Small Business Research Initiative (SBRI)

SBRI is a programme that uses the PCP model to run open competitions from government departments and public bodies to find innovative solutions to public sector problems.

The programme is managed by [Innovate UK](#) and companies with potentially interesting technologies and ideas submit an application, either through the Board or directly to the department /contracting authority, depending on the competition.

Winners are awarded a staged, fully funded research and development contract to develop new commercial products or services. Any organisation can submit an application for a SBRI competition, although they are especially suitable for small to medium sized enterprises.

Forward Commitment Procurement (FCP)

A contracting authority would use the forward commitment procurement model when it wants to stimulate suppliers' development efforts to bring new products/solutions to the market by giving clear visibility to realistic procurement needs. This approach does include a procurement exercise and commitment to volumes/requirements is key to encouraging suppliers to invest in innovation

The FCP model encourages public sector organisations to engage with suppliers by providing credible information about their future requirements and purchases. It also lowers the risk of failure for companies in their most risky period – between developing a product or service and selling it – this encourages them to be innovative

rather than safe. By acting as technologically demanding first buyers of new R&D, public procurers can also drive innovation from the demand side.

The FCP model is designed mainly for the public sector and looks at purchasing from the outcome based specification need instead of purchasing for the immediate perceived need. It addresses the common stalemate where organisations require products or services that are either not available or are available at excessive cost.

By using this model the contracting authority alerts the market to the procurement need and offers to purchase the solution, if the need is met, once it is available, at an agreed price and specification. This provides the market pull to create the conditions needed to deliver innovative, cost effective products and services and unlocks investment to deliver the requirement. This approach also enables public authorities to innovate the provision of public services faster and creates opportunities for companies to take international leadership in new markets. Reducing time to market by developing a strong home market for innovative products and services is key for NI to create growth and jobs in quickly evolving markets such as ICT. The supply of innovative products and services is essential to meet the challenges of the future.

FCP recommends the use of competitive dialogue procedure in most cases.