Innovation step by step

An implementation guide for public procurement of innovation

Introduction

This guide is a translation of the Norwegian guide produced by the National Program for Supplier Development and Agency for Public Management and eGovernment (Difi). The structure you will find is the same as the general guidance for implementation of procurement, with two exceptions, i.e.:

Firstly, we urge you to start the process even earlier than what one usually does in an ordinary procurement process. We would like you to take a step back and consider what the challenges are on a long term. In this perspective, innovative procurement may be particularly relevant. It would be great that you, the procuring officers, advice the management that innovative procurement processes will be a tool for solving matters on a strategic level.

Secondly, we have created a separate phase for the dialogue with suppliers; more and better dialogue results in better goods and services. This applies to all procurement processes and not just when you are doing an innovative procurement. We know that for many procurement officers this is quite unknown, and that they are afraid of making mistakes by having this supplier contact. By this guide, we hope that more people will use the opportunity to find out what is state of the art in the market, and inform suppliers of their needs and challenges in the procurement area.

Now is the time for thinking outside the box, and do things in a new way. You, as a procurement officer can improve the efficiency in public sector, and contribute to environmental solutions and strategic acquisitions in your activities. You can do this by a closer collaboration with suppliers and stakeholders. Best of luck!

Oslo, January 2013

Please note that the guide is a pdf-version of the one presented on www.innobuild.eu. Subsequent amendments will primarily be done in the web based version ("Innovation step by step").

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1 Evaluate needs

An innovative procurement starts earlier than an ordinary procurement. The need is more open, and there may be many unanswered questions that the purchaser must relate to. In such situations it is important to be creative and to spend time to define the need well. Use your long-term plans and future scenarios as a starting point.

- What are the most important trends?
- What are the likely developments in your finances and needs?
- How will this field be organised in the future?

Siemens is an example of a private company that has used long-term trends as a starting point for its long-term focus. Some years ago, they completely changed their strategy. They used global mega-trends such as energy, water and environmental challenges as a starting point, and decided to start producing solutions for such challenges. Read more about the example on http://www.siemens.com/answers/no/no/index.htm (in Norwegian).

1.1 Identify challenges and possibilities for innovation

All procurements start with a need. When your need cannot be met by solutions that are already available in the market, it may be necessary to develop something new. The same is true when your enterprise faces new challenges such as environmental requirements, reduced budgets or re-organisations.

In the private sector, the competition in the market drives innovation. In the public sector, other factors drive innovation. These may include:

- Budget cuts, or demands for increased efficiency
- Expectations from the users
- New laws or regulations, for instance related to the environment
- Political orders or guidelines
- Re-organisations or reforms in the sector

It may be useful to identify what drives innovation in your sector in order to identify the areas that have the most potential for innovation. If you know that new environmental legislation will be forthcoming within an area in which your enterprise is involved, then this may be an area in which innovative procurements should be considered. The same is true if there are large re-organisations in the sector. For example, the Coordination Reform may mean that there is a need for new solutions and measures in the health and care sector. Urban population growth might mean that the

municipality must rethink urban planning and transport solutions. Challenges like these are good starting points for innovative procurements.

When you are identifying potential innovative procurements, remember:

- Think long-term. Needs can change over time and require other solutions than those you have used thus far.
- Concentrate on the overarching goals and tasks of the enterprises. How can this be solved better?
- Do not define the need in terms that are too narrow. Often, descriptions of needs are unconsciously tied to current solutions. A broader review of the need can lead to a completely different solution that eliminates the problem while also solving other challenges.

Tip!
If you really want to be ahead of the curve and be innovative, do what the British National Innovation Centre does: organise a 'Crazy Friday' once every quarter in which everyone is challenged to think outside the box and approach questions completely divorced from the current context. Gather people from different disciplines and departments, preferably in a setting that frees thoughts from the everyday. Ask everyone to think freely about what constrains the enterprise in its goal achievement, and what is needed in order to reach your goals. Ask the question and let everyone do free association. Wouldn't it be great if... ?

1.2 Anchor innovative procurement in strategy and plans

The work on innovative procurements should be part of the enterprise's overarching strategy, and should be incorporated into the procurement strategy. If your enterprise has a research and development strategy, this should be linked to the procurement strategy. Most public agencies create long-term plans or strategies. The municipalities have four-year municipal plans. In the transport sector, there is a ten-year national transport plan that encompasses the areas of responsibility of several enterprises. The long-term plans give direction to the enterprises and indicate the most important focus areas during the period. In the work on these overarching strategies, areas will likely emerge in which there is a need for development and innovation. Therefore, you should review these plans when you create a procurement strategy; ensure that goals are established for innovative procurements. Remember that innovative procurements take time, and the planning process must be started well in advance of the procurement.

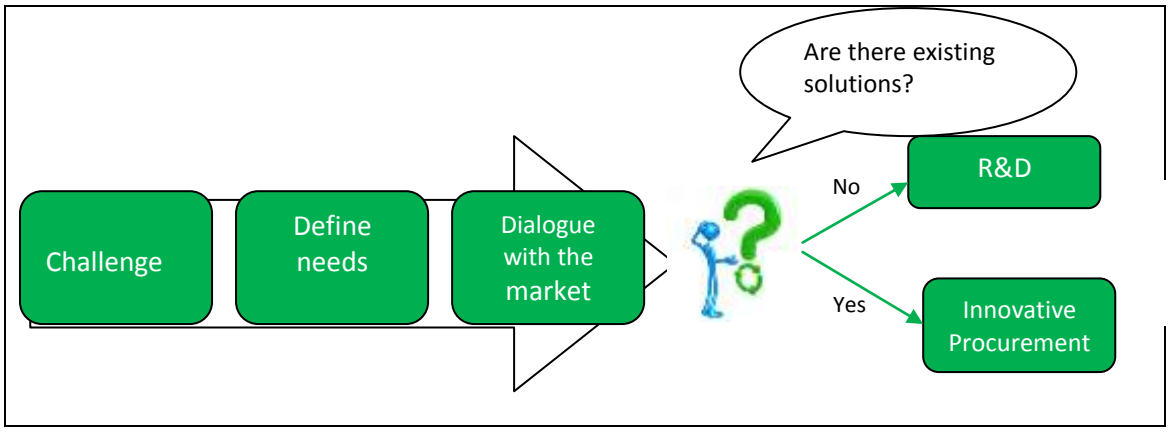
When you are creating a procurement strategy, check:

- Whether there are areas of the overarching strategy that require development/innovation?
- Whether innovative procurements can play a role in any R&D strategy the enterprise has?
- Whether the procurement strategy, overarching strategy and any R&D strategy are coordinated?

1.3 Innovative procurement or R&D project?

Sometimes it is difficult to know whether there are solutions available in the market that either meet your needs or can meet these with some adaptations. Sometimes, the solution may be that several suppliers find each other and together offer a comprehensive solution to meet your need. At other times, the need must be solved by developing something entirely new.

A thorough survey of the market will show whether there are solutions that can easily be further developed right away, or whether a research and development project must be initiated. A broad dialogue with the market, including industry organisations and research and development communities, is the best starting point from which to find an answer to this question.



Sometimes it is a good idea to hire an innovation advisor. If you do research and development within the enterprise, this department should be involved in the process. Such surveying is time-consuming, but can also lead to significant cost savings if you find that there are solutions available that may, for example, already be in use in other sectors and can easily be adapted to your needs.

For further information about Research and development assignments, we refer to Innovation Norway and Vinnova in Sweden.

For inspiration

Acquisition of alarms for dementia the City of Bergen

The City of Bergen is a pilot in the Norwegian National program of Supplier Development and started with the acquisition of alarms for people with dementia in January 2011. Bergen presumed that technology was available and that it would be possible to acquire existing technology with certain adjustments. Through an extensive market dialogue they came to the conclusion that this was not as easy as supposed, partly because of privacy laws. The City of Bergen therefore considers initiating a R&D project to fulfill their needs.

2 Planning and organising

An innovative procurement tends to take longer and involve more people than an ordinary procurement. The planning and organisation must take this into account.

However, an innovative procurement does not need to be planned in detail – there must be room for things to happen during the process. Sometimes, the process reveals that you need to develop something entirely new, which requires you to start a research and development project. Therefore, detailed planning is impractical for innovative procurements.

2.1 Set aside enough time

The opportunities for innovation are often greatest in the phase prior to the start of the actual procurement. You should therefore start the project well in advance of the tender being implemented.

The amount of time that should be set aside for the phase before the tender starts varies greatly, both because the projects vary in complexity and size, and because the enterprises have different prior knowledge about alternative solutions. Many of the issues that must be considered in the planning of innovative public sector procurements are the same as for ordinary procurements:

- Internal decision-making processes (political decisions, budget processes, etc.)
- Planning the procurement, possibly including obtaining the services of an external advisor
- Implementation of the tender and deadlines in the public procurement regulations

An example of a milestone plan for a pilot project in the supplier development programme is provided in the box below. The project has planned a dialogue conference with the tenderers to get the best possible overview of alternative solutions in the market before the tender starts. Note that the phase prior to the start of the tender ('preliminary project') may involve a number of other evaluations, and the schedule below is only meant as an illustration of how the market can be involved.

Tentative schedule for Stavanger municipality:

29 Oct. 2010	Dialogue conference part I
4 Nov. 2010	Deadline for signing up for dialogue conference part II (presentation of proposed solutions)
9 Dec. 2010	Deadline for submitting proposed solutions in writing
14 Dec. 2010	Dialogue conference part II (Oral presentation of proposed solution)
March 2011	Announcement of tender competition
April 2011	Tender deadline
May 2011	Contract awarded
June 2011	Contract started

The following schedule from a project in Oslo, Municipal Undertaking for Educational Buildings and Property (Undervisningsbygg Oslo KF) shows a more extensive project in which they implemented a dialogue conference with the market and a plan and design conference prior to the actual procurement.

January 2008	The Oslo City Council decides to phase out fossil energy in municipal buildings by 2020
Summer/autumn 2008	Undervisningsbygg prepares a plan for the phasing out of fossil energy
January 2009	Collaboration between Undervisningsbygg/Supplier Development for the Capital Region is initiated
29/01/2009	Planning meeting at Helsfyr Hotel between Undervisningsbygg, Supplier Development for the Capital Region, and OREEC
10/03/2009	Dialogue conference hosted by the Supplier Development for the Capital Region
26/03/2009	Idea competition announced
21/04/2009	Innovation workshop hosted by OREEC
08/05/2009	Deadline for submission and participation in the idea competition
01/06/2009	Winners selected

2.2 Anchoring in management

Starting a project to develop new solutions and products requires that you set aside time and resources in the organisation. The work must therefore be anchored in management and the disciplines involved. This is important in order to get access to resources and due to the possible risk in the project.

Management support is crucial to a successful innovative procurement. Management must see innovative procurements as a strategic tool to achieve the enterprise's overarching goals. How the enterprise is organised (for example, whether you usually work across disciplines and in projects, or whether you are organised in strict lines of authority) may be significant to how easy it will be to work on an interdisciplinary innovation project.

The organisational culture is just as important. Are management and the employees ready for change? Do they prefer to do things the way they have always been done? If the culture is more focused on avoiding mistakes than on trying new solutions, this will be significant to whether or not the innovation project succeeds. If you wish to focus on innovative procurements as the rule rather than as the exception, it may be a good idea to start taking measures that focus on the organisational culture.

2.3 Involve users and experts

Get in touch with and involve users and experts in order to get the best possible picture of what the actual need is.
Relevant experts may include:

- people with technical expertise
- innovation drivers or
- communities with competence in research and development projects.

A broad involvement can provide ideas about disciplinary issues and contribute to uncovering any obstacles to innovation projects. These may include, for example, internal guidelines, budget system requirements, etc. When you are working with innovative projects, it is a good idea to think even more broadly than you usually do. A diverse working group within your enterprise can offer many good ideas.

The users know the needs best. Large business actors in, for example, mobile phones and the car industry are working in a targeted manner to uncover unmet user needs and use the knowledge to develop new solutions and products. These businesses are therefore at the cutting edge of innovation.

The public sector can also get better at asking users directly about what their actual needs are. For example, if you are to procure a new computer system for external users, set aside time to conduct a user survey ahead of time to identify what the users are satisfied with in the current solution and what new functionalities they would like. For procurements of complex services such as for instance care for the elderly, you can compose specific focus groups consisting of the elderly, next of kin, home-based services, Assistive Technology Centres, doctors and the municipality in order to develop comprehensive solutions for the user. Similar focus groups may be put in place for the development of, for instance, transport solutions.

2.4 Conduct a risk assessment

When you implement procurements that are to promote innovation, risk management is especially important as there may be significant uncertainty related to the product or service that is procured. Both the contracting authority and the supplier will have risks associated with an innovative procurement. However, you will also both have opportunities associated with the innovative procurement.
Risk may be tied to the following:

- Whether the delivery actually meets the need
- What the final cost will be
- Whether the organisation can implement and make use of the innovation
- Whether the innovation will succeed in the market

Risk analyses should be conducted continuously throughout the procurement process, and should focus on:

- Existing risks and the likelihood that these risks actually arise.
- At which stage of the process may the identified risks emerge?
- Which of the parties can best 'carry' the risks associated with innovation? If you place most of the risk on the supplier, costs are likely to increase substantially. Your decision must balance these considerations.

- Can the risk be divided into elements and be shared between the parties based on which party can best carry each risk element?

It is important to identify risk and place it with the party that is most able to control it. In many cases, this will also be least costly solution.

2.4.1 Regulating risk in a contract

An 'innovation contract' should be based on the results of the risk assessment, tender documentation (specification) and the supplier's tender, and should contain the following elements (not an exhaustive list):

- The supplier's result/obligations
- The contracting authority's assessment of the supplier's achievement of the award criteria (contractualise the solution).
- A solution/system in the event that the proposed solution is unsuccessful/does not work.
- How contract management is to be handled.
- A bonus system (and possibly a malus system) that depends on the results achieved.
- Intellectual property rights and the relationship to third-party rights must be regulated in the contract.

In the procurement process, the contracting authority can lower its own risk related to the product/service that is to be developed. The figure below shows risk-reducing measures that can be implemented:

	Measures to reduce risks	**Purpose**
When needs are defined	• Set aside enough time during the planning phase to involve the end-users and to clarify which internal interfaces must be considered • Invite external expert communities with other/updated expertise • Investigate the opportunities in the market (be in dialogue with possible tenderers)	• Ensure that the needs that has been defined, is real • Ensure that all internal system challenges are handled in connection with the tender (so that the product/service is not stopped during implementation) • Identify all direct and indirect costs by defining the need in a new way • Ensure that you have up-to-date market knowledge (avoid developing market solutions for

		platforms/systems that will soon be replaced)
In the development of the tender documentation	• Prepare functional/performance-based specifications • Contractualise requirements to quality of delivery • Contractualise incentives and sanctions • Use contracts with a contract period and compensation models that reflect the supplier's investment and risks	• Move the risk related to the solution fulfilling the need from the contracting authority to the supplier • Verify that the solution offered meets the need/delivery requirements • Ensure that the supplier has an incentive to continue to develop the product/be innovative throughout the contract period • Avoid "excess pricing" resulting from the supplier's risk coverage

The text has been prepared in collaboration with Inventura

3 Dialogue with the market

Innovative public sector procurements require closer contact between tenderers and customers than traditional procurements. A dialogue between the market, users and other exerts gives you better information about what is available in the market and the possible solutions that can be developed.

Telling the market about your long-term development needs and about what is important to you (e.g. environmental requirements) will stimulate the tenderers to develop new proposals for solutions.

Holding a plan and design competition is another way to get the market to develop proposals for solutions to various challenges. You can read more about this under implementing a competition.

3.1 How do you conduct the dialogue?

The rules on public sector procurements do not prevent public agencies from being in dialogue with tenderers prior to the announcement of the tender, but it is important to make sure that the dialogue does not prohibit competition and that the equal treatment principle is maintained.
You must therefore make sure that you:

- have clear 'rules of the game' so that the goals of the dialogue are clear and that the tenderers know that at a later stage they must complete for future deliveries
- provide information about overarching future plans
- make the information available to all interested tenderers
- hold meetings that all interested parties can participate in. Ensure that all meetings are broadly announced ahead of time

The announcement should be made:

- as a prior information notice on Doffin when there are specific plans for a procurement
- on the enterprise's homepage
- by using other media and networks
-

3.2 Who should I conduct a dialogue with?

Your needs and how much knowledge you have up front about available options determine who should be involved in the dialogue.

You can organise the dialogue in many ways and with tenderers, research communities and other relevant experts or user groups. Groups that you may want to include can be:

- Tenderers
- Industry associations and business networks
- User and interest organisations
- Business development communities
- Other public agencies, such as planning authorities
- Research and development communities

3.3 Market research

When making an innovative procurement, you should research a broader market than you would for ordinary procurements. Solutions to your needs may have been developed in other markets. Market research should also include the activities of relevant research and development communities.

A simple survey of the market starts by searching the Internet. There are many groups on social media platforms such as LinkedIn, Facebook etc. that you can keep an eye on. It may also be a good idea to participate in shows and conferences in which new solutions are presented, for instance for ICT. The EU is also an arena with much activity. For example, currently there are many projects within welfare technology and sheltered housing.

You can find an overview of current innovation projects in the EU here (external link).

You can find a list of projects that have received R&D funding (for research and development for the public sector) here (in Norwegian).

3.4 How to conduct supplier conferences

You can use supplier conferences when you want to provide general information about the enterprise's future needs and the progress plan for the procurements. The suppliers provide ideas that you can use in the ongoing work. You can also use the supplier conference to tell suppliers about special conditions that you want to emphasise in the future, such as environmental concerns.

3.4.1 The objectives of the supplier conference

- The enterprise wants to provide information and prepare the supplier market for future procurements.
- The enterprise wants more attention, more tenderers and greater competition.

3.4.2 What is the target group?

- The conference is open to all suppliers
- Relevant industry associations and business networks
- R&D communities
- Relevant interest organisations and business development communities
- Planning authorities

3.4.3 Content for the agenda and presenters

- Information about the enterprise
- Presentation of the enterprise's future procurements
- Presentation of the enterprise's special focus areas
- The schedule and progress plan for the procurement

3.4.4 Budget for the supplier conference

- Participation fee
- Cost of presenters
- Meeting venue
- Catering
- Invitations
- Announcements

3.4.5 Marketing

- Use voluntary/prior information notice on Doffin
- Purchaser's website
- Other media and networks

3.5 How to implement dialogue conferences

It can be difficult to get tenderers to share information when competing companies are present. In such circumstances, you may hold an initial joint meeting in which the contracting authority shares information about plans and challenges, and follow this up by having the tenderers provide information about their solutions in separate subsequent meetings. The contracting authority should create rules for the meetings with the tenderers, and impose requirements with regard to how the information is to be presented.

3.5.1 The objectives of the dialogue conference

- The enterprise is procuring something that focuses on one or more disciplinary areas.
- The enterprise has defined specific issues that it wants suppliers to address, and it wishes to present these to the supplier market.
- The enterprise wishes to hold a dialogue with the tenderers about what can be delivered.
- The enterprise wants more attention, more tenderers and greater competition.

3.5.2 What is the target group?

- Open for all suppliers interested in the procurement
- Relevant industry associations and business networks
- R&D communities
- Relevant interest organisations and business development communities

3.5.3 Content for the agenda and presenters

- Information about the enterprise's and goals and details about what is to be procured
- Presentation of the enterprise's special focus areas
- Purchaser presents specific needs and issues to be addressed in the procurement
- Dialogue between the purchaser and suppliers/industries/R&D actors
- The schedule and progress plan for the procurement

3.5.4 Co-organiser

- The enterprise can organise the dialogue conference in cooperation with relevant industry associations, business networks, etc.
- The co-organiser can be a presenter on the relevant topic to be discussed and can help spread information to possible suppliers

- Subsequent to the dialogue conference, the companies may need to meet and discuss the task the enterprise has described, and the co-organiser can play an active role in this context.

3.5.5 Budget for the dialogue conference

- Participation fee
- Cost of presenters
- Meeting venue
- Catering
- Invitations
- Announcements

3.5.6 Book suitable meeting venue

- Do you want a classroom setup, tables for groups, etc.

3.5.7 Marketing the dialogue conference

- Voluntary/prior information announcement on Doffin
- Purchaser's website
- Other media and networks

3.5.8 After the dialogue conference

- Prepare minutes from the dialogue conference, including from the presentations, and post this on the enterprise's homepage so that the same information is available to those who were unable to participate.
- Companies that want to continue to participate after the dialogue meeting can submit a written description of how they can be solve the need and challenges (no more than four A4 pages) and offer the municipality good advice in the procurement process.
- The proposed solutions should preferably be described at an overarching and functional level. Ideas that emerge in this process can be used in both the preparation of the requirement specifications and in subsequent procurements.
- Part II of the dialogue conference is then held (see schedule below). In this part, all interested parties are individually invited to dialogue meetings to verbally present their ideas and to open for a dialogue about challenges and possible solutions. The goal is to gain the best possible knowledge about the possible options and alternative solutions for the specific area of new warning systems for nursing homes.

3.6 How to conduct one-on-one dialogue meetings

It can be difficult to get tenderers to share information when competing companies are present. In such circumstances, you may hold an initial joint meeting in which the contracting authority shares information about plans and challenges, and follow this up

by having the tenderers provide information about their solutions in separate subsequent meetings. The contracting authority should create rules for the meetings with the tenderers, and impose requirements with regard to how the information is to be presented.

3.6.1 The objectives of the dialogue

- This form of meeting is organised after the dialogue conference
- The enterprise wants the supplier to make suggestions for solutions to the issue the enterprise has described
- Prior to the one-on-one meeting, the enterprise asks participating companies to submit a written proposal for a solution
- The proposed solutions form the basis for the functional requirement specifications that will be forthcoming from the enterprise

3.6.2 What is the target group?

- All participants from the previous dialogue conference and new interested parties

3.6.3 Content for the agenda

- The enterprise prepares a meeting plan in which the enterprise meets each company in one-on-one meetings. Each meeting lasts for 20-30 minutes.
- The enterprise prepares a set agenda for all of the meetings. The agenda contains the same sections/questions to be discussed. This ensures equal treatment.
- The supplier gives an oral presentation of the proposed solution.
- In the meeting, only the submitted documentation is discussed.
- Information that is submitted is confidential.

3.6.4 Budget for one-on-one meetings

- Meeting venue
- Catering
- Invitations
- Announcements

3.6.5 Marketing

- Voluntary/prior information announcement on Doffin
- Purchaser's website
- Other media and networks

It is also possible to ask for descriptions to be submitted that address the need without first conducting one-on-one meetings.

Inspiration

The example below is used in some of the pilot projects in the National program for supplier development:

'We prefer that the proposals for solutions that are presented have a limited scope and that the solutions be described at an overarching and functional level. Those who want to present their proposal for solutions will be given the opportunity to present a description in writing (preferably no more than five A4 pages) and to give an oral presentation. Ideas that emerge in this process may be used both in the preparation of the requirement specifications and in subsequent procurements. These procurements will be conducted as a subsequent process, pursuant to the Public Procurement Act'

3.7 Use information from the dialogue with the market

The information you have gained through the dialogue with the suppliers and expert communities provide useful ideas in the work on the tender documentation. Make sure that you do not reveal business secrets, that the dialogue does not lead to unequal treatment, or and that it does not prohibit competition.

3.7.1 Tip about the evaluations you should do before writing the tender documentation:

- Has the information you have received provided a basis from which to describe the need in another way than you had initially planned?
- How should the competition be designed in terms of the division of the procurement, the form of the tender and the award criteria?
- Do you need to start a development project to attend to more long-term needs?

Through the dialogue, the suppliers may have made suggestions or offered ideas that contain business secrets. You must be attentive to this issue, and not reveal business secrets when preparing the tender documentation.

3.7.2 Equal treatment

One of your challenges is to use the information you have gained through the dialogue in a way that does not prohibit competition and that safeguard the equal treatment requirement. Therefore, make sure to:

- ensure that all information about the project/procurement is available to all interested suppliers
- describe the need in terms of a performance or functionality requirement, and do not tailor the tender documentation to one supplier's solution
- equalize any competitive advantages some suppliers may have received by giving a longer deadline for submission of tenders

4 Implement the tender

The procurement regulations leave room for innovation and collaboration between the contracting authority and the supplier. The way the assignment is described in the tender documentation is especially important in order to open for input from the tenderers and thus promote innovation.

Some procedures are especially well suited to promoting innovation. Here, we describe how you can promote innovation in the specification of the assignment and in the selection of the type of tender.

Inspiration

Procurement for Innovative Proposals

PIANOo is a Dutch organization providing a stimulus to government bodies to elicit innovation from their procurement procedures. PIANOo brings together experts within the "Public Innovation Procurement" expert network, combines knowledge and experience, and gives advice.

PIANOo has published the guide "Procurement for Innovative Proposals".
The link is:
http://www.pianoo.nl/sites/default/files/documents/documents/procurementforinnovativeproposalsdecember2011.pdf

4.1 Preparing the specification

Detailed technical specification requirements tend not to give the tenderer the opportunity to provide new solutions. Instead, try to describe your need and/or what the result should be and the effect you wish the solution from the tenderers to achieve.

4.1.1 Formulation of specification

How to stimulate innovation in the formulation of the specification?

- Focus on describing the need/function that is to be fulfilled, rather than describing the solution that is to be offered.
- Formulate the needs/functional requirements in sufficient detail for the tenderer to easily understand what the subject of the contract is.
- Regardless of its type, a specification will normally have 'shall requirements, 'should requirements' and occasionally 'would be convenient requirements'. An extensive use of 'shall requirements' will reduce the opportunities for innovation.

A *needs and performance specification* describes the needs to be met without detailing how the need must be met. Thus, you leave it the market to propose the best way of meeting the need. This allows for innovation. Additionally, you improve the likelihood that more tenderers will show interest in the tender competition.

Functional specifications describe the need to be met and how the need must be met (function). Such specifications are characterised by a focus on results and effects. It is up to the market to propose how the task is to be solved and the method to be used. A contract that includes functional specifications will therefore be followed up on and controlled based on the listed targets rather than based on based specific activities during the contract period.

4.2 Qualification requirements

That the contracting authority wants and aims to promote innovation in the procurement process should always be clearly stated in the tender documentation. By formulating qualification requirements and/or award criteria that show that you are looking for and will remunerate innovative tenderers and solutions, you send clear and explicit signals to the tenderers that this is critical to being successful in the tender competition.

Qualification requirements are requirements that an enterprise must meet in order to be considered appropriate for the implementation of the contract.

If the experience the supplier has with tenders related to innovation is essential to the success of a specific delivery, such experience should be required at the qualification stage.

It may be appropriate to require:

- Experience in working on innovation. Documentation: overview of experience.
- References from previous innovative projects. Documentation: overview of references.
- Information about how the supplier has contributed to innovative elements in similar assignments.

If you use the above requirements, you must specify what you mean by 'innovation'. For example, 'innovation' may mean developing new relevant solutions or references from a research and development project.

4.3 Alternative tenders

Regardless of which tendering process you choose, the framework in the tender documentation can limit the tenderers' opportunity to suggest new solutions in their tenders. The procurement regulations allow you to include an option in the tender documentation that permits the market to submit alternative tenders.

Section 4-1, letter k of the Norwegian “Regulations relating to public procurement” (Forskrift om offentlige anskaffelser) defines an alternative tender as an “offer that is prepared according to the contracting authority's stated alternative minimum requirements to performance or function, and any special requirements to the design of the tender”. An alternative tender is thus an offer in which the supplier consciously deviates from one or several aspects of the specifications.

If you want to permit alternative tenders, you must state this in the announcement. The tender documentation must also include:

- alternative minimum requirements to performance and function. If this is not included, alternative tenders cannot be submitted or accepted.
- information about the awarding of the contract being based on the most advantageous tender

The evaluation of tenders in a competition that permits alternative tenders can be very challenging. You can only choose an alternative tender if it leads to a better overall

solution for the contracting authority, based on the same award criteria as for the rest of the tenderers in the tender competition.

Alternative tenders are more appropriate where the procurement has been described through detailed technical specification than where it has been described in terms of needs/performance or function. If the tender documentation uses a functional technical specification, the tenderer chooses how it wants to fulfil the requirements.

The contracting authority is not obligated to choose an alternative tender even if it permits such tenders to be made.

4.3.1 Advantages of permitting alternative tenders:

- The market gets the opportunity to showcase alternative solutions
- Potentially fulfils the contracting authority's needs better
- Challenges the market to take a creative approach to solutions

4.3.2 In tenders where alternative tenders are permitted, it is important to be aware that:

- The contracting authority must have a thorough plan for the implementation of the tender.
- The award criteria must be formulated in such a way that they incorporate rewards for the relative advantages associated with a broad spectrum of proposed solutions.
- The contracting authority must have a model for the evaluation that has been thoroughly thought through to ensure a relevant comparison of the different solutions that have been proposed.
- It is important to have extra focus on good evaluation competence.

4.4 Selection of procedure

The regulations for public sector procurement allow several forms of procedures for the implementation of tenders. The procedures provide different opportunities for interaction between the parties and thus in practice also affect the opportunities for innovation.

At a general level, the different procurement procedures can be ranked as follows, from a low to a high degree of opportunity for innovation:

- Open tender (low degree)
- Restricted tender (low degree)
- Negotiated tender (medium degree)
- Planning and design tender (medium degree)
- Competitive dialogue (high degree)

Regardless of which procedure you choose, the opportunity for innovation will be strongly affected by the way the need has been specified.

4.5 Open and restricted tender

Tenders provide little incentive to search for innovative solutions. The strict frameworks in a tender often lead the procurer to set detailed requirements for the solutions. For the market, it is less attractive to offer creative and innovative solutions when there is limited opportunity for dialogue and adaptations.

Both open and restricted tenders are characterised by the parties being barred from negotiating about the solutions as part of the implementation of the tender, pursuant to the ban on negotiations in section 12-1 and 21-1 of the Norwegian "Regulations relating to public procurement" (Forskrift om offentlige anskaffelser). The contracting authority is therefore dependent on presenting a final and comprehensive basis for the tender in conjunction with the announcement. The market must relate to the premises the contracting authority has provided, and has no opportunity to discuss adaptations to the solutions proposed.

Section 4-1, letter k

4.6 Negotiated tender

The basis for the promotion of innovation is not primarily formed in the selection of a negotiated tender, but in the work on defining and verifying the need and in preparing the specification and award criteria. However, the procedure enables the parties to jointly reach more optimal adaptations of the solutions to the needs and specifications on which the procurement is based.

Negotiated tenders can be freely used in procurements below the EEA threshold value and for non-priority services. Procurements above the threshold value must fulfil specific requirements in order to use the negotiated tender procedure.

The tenders are based on the specifications, requirements and criteria set by the contracting authority in conjunction with the announcement of the tender. Negotiated tenders are characterised by the parties having the opportunity to negotiate all aspects of submitted tenders as part of the tendering process. This also means dialogue and negotiations related to the offered solutions and their characteristics, as seen in the context of the need the contracting authority seeks to meet.

4.6.1 To further innovation through negotiated tenders, the process must be based on:

- Function- or performance-based specifications that stimulate the development of new solutions.
- Award criteria that allow for innovation.
- Award criteria that provide room for negotiations to sharpen/tailor the offered solution so that it meets the identified needs in the best way possible.
- Sufficient competence on the part of the contracting authority and the tenderers to implement effective dialogues about solutions during the negotiations**.**

4.6.2 Innovation advantages of negotiated tenders

- Facilitates greater use of discretion in the tender on the part of the procurer.
- Provides opportunities for adjustments and improvements of needs and solutions during the purchasing phase.
- Greater chance of getting the optimal solution.

- Better commercial terms are normally achieved by active use of negotiations (can 'force' innovative production methods/work processes internally that provide better terms)

4.6.3 Limitations to innovation imposed by negotiated tenders:

- The specification in the tender documentation can limit innovation through the use of closed specifications or excessive use of 'shall' requirements.
- A lack of negotiating competence contributes to a limited use of the room for negotiation (e.g. only negotiating price).

4.7 Competitive dialogue

In especially complex contracts, you can use the competitive dialogue procedure. The procedure is very well suited for promoting innovation, as it stimulates dialogue and learning between the procurer and the market throughout the purchasing phase. It makes an active dialogue about needs and possible solutions possible. This includes dialogue related to the need and opportunities for innovation. At the same time, the procedure stimulates competition.
Competitive dialogue is a procedure pursuant to part III for the award of complex contracts cf. section 14-2 of the Norwegian "Regulations relating to public procurement" (Forskrift om offentlige anskaffelser).

The regulations define a contract as especially complex in cases where the contracting authority cannot objectively detail the technical requirements that can meet the need and purpose in question, or objectively identify the legal and financial conditions related to a project. These are typically some IT contracts and public-private contracts.

A competitive dialogue is implemented in three clearly separated phases:

- Pre-qualification phase
- Dialogue phase
- Offer/award phase

The pre-qualification phase consists of selecting the suppliers that are to be permitted to participate further in the process.

The dialogue phase takes place prior to the preparation of the final tender documentation. The dialogue phase is based on the contracting authority's description of a need or a goal/desired effects that have no obvious answers/solutions. Innovation may occasionally be required because there is no current solution that can fulfil the need. The purpose of the dialogue phase is to identify and determine how the contracting authority's needs can best be met. This means both a shared analysis of the actual need and a dialogue about possible solutions that can fulfil the need in question.

After the dialogue phase has been completed, the tenderers are invited to submit final tenders based on the solutions that were identified in the dialogue phase.

4.7.1 Advantages of the competitive dialogue process:

- Allows the purchaser to specify the desired result without specifying the way this should be delivered.
- Provides a better understanding of the distribution of risk and subsequent costs/benefits.
- Provides the purchaser with the opportunity to discuss all aspects of the proposed solutions with the selected tenderers, e.g.:
    - The functionality of the solution (functional and technical)
    - Opportunities for integration
    - Installation and operating alternatives
    - Price/cost and benefits
    - Implementation and implementation plan
    - Processes/routines
    - Better facilitates a more precise understanding of the actual need.

4.7.2 Requirements for the implementation of a competitive dialogue:

- The invitation to participate must include a document that describes minimum requirements, wishes and any interfaces.
- The invited tenderers must comment on the requirements based on specific criteria, and make suggestions for changes to the requirements, additional requirements and ideas for how the contracting authority can achieve the best possible solution.
- The dialogue continues until the contracting authority has found the solution(s) that best meets its needs.
- When the best solution(s) has been found, the dialogue is declared concluded. All participants who were invited to the dialogue will be encouraged to submit a final tender based on the solution(s) presented.
- The final tender must be submitted by a given deadline and must contain all necessary elements to implement the assignment. After the dialogue has concluded, no negotiations are permitted regarding the final tenders. However, clarifications and specifications are permitted.

The competitive Dialogue

* A guide based on the experience of the Dutch Rijksgebouwendienst, Rijkswaterstaat and the Ministry of Defence (2009) you may read here: http://www.pianoo.nl/sites/default/files/documents/documents/thecompetitivedialogue.pdf

The interplay between public procuring authority and private competitors: Experience with the competitive dialogue. Paper by S. Lenferink and Ir.M.E.L. Hoezen (2011). ISBN: 9789052693958.

4.8 Planning and design competitions

Planning and design competitions can provide good opportunities to foster innovative solutions. The procedure can be used within areas such as land-use planning, urban planning,

architecture and engineering work or data processing in order to produce concepts, plans or designs that provide guidelines for the further process in the relevant project.

4.8.1 How to implement a planning and design competition

- At an early stage of the process, include a broad selection of involved disciplines that will be associated with the final product/solution. This way, you ensure that all interfaces between the actors are attended to.
- Prepare detailed tender documentation with description of performances.
- Announce the planning and design competition.
- The participants in the competition must be informed of the rules for the implementation of the competition.
- Create a diverse, relevant and independent jury.
- The jury selects the winner. Consider remuneration and/or prize.

4.8.2 Prerequisites that allow planning and design competitions to promote innovation

- Open for a broad market in the qualification process. Focus on the ability to implement in relation to the degree of difficulty of the project, not on the documentation of experience with and implementation of similar individual assignments.
- At a minimum, the specification should be function-based, and if possible performance-based, in order to secure a framework that provides room for the tenderers to develop creative solutions and/or prepare suggestions that the contracting authority has not been able to imagine during the programing process.
- The contracting authority must be attentive to the fact that the tenderers are forced to disclose their primary commodity, inclusive their creative solutions, in planning and design competitions. They must do so without a guarantee of being paid for their service.
- Generally, all tenderers will have put in a significant number of hours for free. We recommend that the contracting authority considers remunerating tenderers during restricted procurement processes. This way, you ensure optimal performance by the tenderers and the contracting authority gains the right to use the results in the future case processing, as long as this right is stipulated in the tender documentation. Norske arkitekters landsforbund (NAL, 'National Association of Norwegian Architects') has discussed the remuneration of work on the ender in planning and design competitions as a matter of principle. NAL recommends that the creative work be remunerated, if at a symbolic level. This ensures that the contracting authority receives the best performance during the competition, and enables the contracting authority to refer to the presented solutions from all tenders in the further process.

4.9 Award criteria

The selection of award criteria can be very significant to the tenderers' incentives and opportunities to provide innovative solutions.

Awarding contracts solely based on the lowest price may be inappropriate in terms of furthering innovation. This is because innovation is often associated with some degree

of risk/uncertainty both for the contracting authority and for the tenderer. For a tenderer, this will in turn be associated with increased costs. If the contracting authority focuses on price exclusively, the tenderer cannot necessarily take on the increased risk associated with supplying an innovative solution/product. If the goal is to further innovation in the procurement process, you should select the most economically advantageous tender as the awarding method rather than the lowest price.

The award criteria form the framework for how the evaluation of the solutions offered is to take place, cf. sections 13-2 and 22-2 of FOA.

4.9.1 Important elements in the design of the award criteria:

- Use criteria that can be evaluated and measured. Innovation must always be tied to something that is measurable and valuable to the contracting authority.
- Always identify the internal weight between the selected award criteria, so that participants know how the evaluation of the tenders is balanced based on the weight of each criterion and their importance to the contracting authority.

Quality (measured in some form or other) and price are often used as award criteria. In order to open for new and innovative solutions, these should be tested and challenged in relation to the contracting authority's needs. The use of open specifications, typically in the form of a performance specification or functional specification, imposes special requirements for criteria that can determine that the specification and the underlying needs are met in the tenderer's tender.

There are many ways of doing this. It is crucial that the specification is designed in an open manner in which the contracting authority describes the needs/functions that are to be fulfilled and the tenderers are asked to describe their solutions for *how* the need/function is to be fulfilled.

The awarding of assignments focused on innovation can be tied to:

- Task comprehension
- Proposed solution

Functional characteristics of the solution (such as usability, security, compatibility with products that interface with the solution)

Examples of award criteria that can promote innovation:

Task comprehension	How does the tenderer document their comprehension of the problems the contracting authority wishes to solve?
Proposed solution	To what extent does the solution offered meet the challenges the contract authority faces? Does the tenderer suggest new solutions that are appropriate for the contracting authority's needs? Degree of innovation in a proposed solution. Remember that innovation should be rewarded to the extent that it contributes to better solutions, for instance by extending the lifespan of the product, lowering life cycle costs, providing

	sustainable solutions.
Functionality	The functional characteristics of a solution (e.g. usability, security, compatibility with products that interface with the solution).
Better quality, better performance, better synergy	The contracting authority can stipulate minimum requirements to what a specific procurement must achieve. In such cases, the contracting authority must define how and within which areas these effects are desired beyond the stipulated minimum requirements. This should preferably be done by tying the effects to the overarching goal of the procurement.
Environmental benefits (sustainable solutions)	Public sector procurers should focus on promoting environmentally friendly and sustainable solutions and on rewarding innovations that offer this type of solution.
Life Cycle Costs (LCC)	A focus on life cycle costs enable the tenderers to focus on solutions that may be more expensive to produce or obtain now, but that have lower costs or other measurable positive effects in the longer term.

4.9.2 About the 'price' award criterion

Price is almost always used as an important award criterion for public sector procurements. Both laws and regulations on public sector procurement refer to the effective use of resources as a fundamental objective. However, placing too much weight on price can redirect the focus away from the desire to promote better solutions through fresh thinking and innovation. A pressure on price can contribute to increased efficiency (working faster), but not necessarily increased innovation (working smarter).

If there are fixed budget frameworks for the solution to a specific task, the fundamental objective of having an effective use of resources can be met by reformulating the economic criterion to *'Who can provide the best possible result within my economic framework of NOK X?'*.

In order to succeed with this approach, it is important to:

- Have good market insight, to ensure that the framework is at the right level in relation to the requirements that have been set.
- Clearly formulate how the performance requirements will be measured, for instance
  - how many units of a product/service must be achieved
  - which services are to be included in a solution
  - which functions the product must fulfil
- Clearly formulate how better performance is to be measured, for instance in terms of
  - fewer work operations (reduced strain on personnel)
  - higher quality
  - lower emissions, waste or environmental impact

4.10 Evaluate tenders

Open specifications, procedures that invite dialogue, being open to alternative tenders and the awarding of contracts based on the most economically advantageous tender are important prerequisites to facilitating innovation in public procurement processes. At the same time, these conditions may contribute to making the implementation of the tender and the evaluation of the tenders challenging and resource intensive.

In order to promote innovation, the contract should generally always be awarded basedon the most economically advantageous tender criterion.

This assumes that the contracting authority has evaluated and tested whether the selected award criteria facilitate a good and efficient evaluation process. Among other things, the contracting authority must evaluate:

- whether the criteria open for rewarding relevant differences in the solutions likely to be proposed, and
- whether the contracting authority has the necessary competence to identify relevant differences between the solutions offered. Therefore, it is important that relevant disciplinary and user competences related to the procurement are represented well in the evaluation team.

The contracting authority should address both issues as early as possible in the implementation of the tender. The fundamental requirements stipulated in section 5 of the Act relating to public procurement must be complied with throughout the procurement process, including during the evaluation process.

The evaluation of the tenders will be tied to several phases and issues (requirements, terms and criteria).

Evaluation: qualification requirements (requirements to the tenderer)	Evaluation: minimum requirements (absolute requirements) to the performance/delivery	Evaluation: terms of contract	Evaluation; award criteria
Approved or not approved	Approved or not approved	Accepted or not accepted Reservations?	Price or the most economically advantageous tender

The above figure shows that the evaluation of the tenders will be conducted in several phases, from the qualification of the tenderers, to the testing of whether the tender meets the absolute minimum requirements to the performance, and further to whether

any reservations have been made. Finally, when these 'obstacles' have been passed, the tenders are evaluated against the set award criteria.

It is essential to evaluate the tenderers' proposed solutions with a focus on creativity and innovation, and the effects these can provide. However, this is rarely done without considering the price. Innovative solutions may cost more, especially in the short term. Most procurement processes will have a budget framework to relate to. Thus, the main challenge in the evaluation phase is to weigh the award criteria in relation to getting the best value across the lifespan of the contract.

There may also be a dynamic between the evaluation of the price and the proposed solutions. One hypothesis is that the more radically innovative a proposed solution is, the higher the price will be. This means that there must be an incentive in the award criteria so that it is clear to the tenderers that finding a creative/innovative solution to the need will be rewarded.

The contracting authority should weight the award criteria by using intervals with suitable maximums. For further information about intervals with suitable maximums, see FAD's guide (external link). The importance of financial planning suggests that the maximum should not be too large. Yet the importance of enabling the contracting authority to choose innovative solutions may suggest that the maximum should be larger. The contracting authority cannot know in advance which solutions are offered, and the interval should leave room to reward relevant values in the tenders.

In practice, it can be difficult to evaluate award criteria that include and value innovation. Prior to the announcement and at the latest prior to the evaluation, the contracting authority should prepare an evaluation guide for each award criterion. Conducting simulations of the award criteria and evaluation model can help clarify issues in the work on formulating the award criteria and any subsidiary criteria. Simulations are important in order to feel confident in your selection of a tender.

4.11 Requirements in the contract

The contract is an effective tool for stimulating innovation among the tenderers in the tendering process and contract period. Additionally, the contract is especially important to assure the quality of deliveries during the entire contract period, and to reduce your risk in purchasing new services/products that are associated with great uncertainty.

The contract can also contribute to reducing/preventing innovation if the terms are (too) strict or unreasonable for the tenderers. This includes, for example:

4.11.1 Payment plans

Payments to the tenderer based on strict milestones or only at final delivery may mean that only larger enterprises have sufficient capital to participate.

4.11.2 Risk placement

There may be good reasons for the contracting authority not wanting to assume the risk associated with the supplier's performance and to therefore limit their payment obligations. In innovations, it may be difficult to remove all risk. Whether it is reasonable for the supplier to assume the entire risk is a question that must be asked. The contracting authority should consider whether it could accept some risk, for instance related to delays and minor delivery deviations.

4.11.3 Sanctions regime and its enforcement

Most contracts should contain a regime for sanctions. At the same time, in the enforcement of the sanctions it is important that the contracting authority include evaluations related to bonus and malus. In consideration of the nature of the innovation contract, the contracting authority may want to be a bit more careful than otherwise about enforcing all sanctions at first opportunity.

4.11.4 Checklist for designing contracts for innovative procurements:

When there is considerable uncertainty associated with the delivery in an innovative procurement, purchasers must be especially aware of the following in the preparation of the contract:

- Specification of the delivery (the supplier's proposed solution).
- Approval of the delivery (when is the delivery approved?)
- Handling missing deliveries.
- Handling and documentation of change orders.
- Relationship to third-party rights.
- Intellectual property rights.

4.11.5 Procurements officers can stimulate innovation in the implementation phase through:

- Duration of contract
  Must reflect the supplier's investments in capital and competence to develop/further develop the product or service. For products/services that require a longer development period, a longer contract term can help the supplier assure a greater volume and thus prevents the supplier from having to 'dump' development costs onto the purchaser over a shorter period.

- Allow subcontractors
  By allowing the use of subcontractors, the contracting authority can help the supplier develop solutions in collaboration with other actors.

- Subcontracts
  By splitting the contract for a delivery, the contracting authority can allow the most innovative tenderers to supply the parts of the assignment that they are best suited to deliver. In this way, the contracting authority can get solutions that are more innovative than the solution that individual tenderers can offer. In such cases, the

contracting authority should be sure that the benefits of the new solution exceed the costs associated with greater contract administration.

- Compensation/price models
  The contracting authority can stimulate innovation through different price models that give the supplier the opportunity to develop more innovative solutions. For example, the contracting authority can use bonus models that provide extra compensation when needs are met (quality, effects) to an even greater extent or for lower costs to the purchaser. The supplier's higher earnings will be an important motivator for further developing existing solutions.

  In cases where the costs related to the inputs are uncertain, the contracting authority can combine compensation models in which the suppliers are compensated for their actual costs and at the same time are given a margin that varies depending on the quality of the delivery and/or the ability to lower the costs of the inputs.

- Provisions related to intellectual property rights
  The contracting authority can stimulate innovation amongst the suppliers by giving them the opportunity to use the solutions they have developed in other contexts and/or to further develop the solutions for commercial use. Such provisions will also contribute to placing a greater share of the development costs/risks on the supplier.

4.11.6 Contracting authorities may stimulate innovation during the contract period through:

- Compensation models that reward further innovation:
  Compensation models that give the supplier the opportunity to achieve better terms by further developing the product in ways that give the contracting authority better quality/lower costs gives the supplier an incentive to innovate during the term of the contract.

- Options
  The contracting contracting authority can tie options to specific delivery targets, in order to stimulate the supplier to further develop the solution during the contract period.

- Administrative provisions
  By creating a contract follow-up organisation that meets regularly in order to further develop/improve the delivery, the contracting authority can stimulate innovation during the contract period.

5 Follow-up and evaluation

The procurement of innovation often involves changing the way tasks are implemented. In this phase, it is important to remember to follow up the implementation of the procurement, to involve employees, users and others to ensure that the new solution is used – and used correctly. If new solutions have been developed,

the division of rights and obligations must be regulated in the contract.

It is important to evaluate the innovative process in other to ensure that lessons are learnt for the next innovative procurement. What were the critical factors for success? What were the challenges?

5.1 Implement the innovation

It is especially important to follow up innovative procurements. New solutions will often lead to changes in work routines and perhaps changes in the organisation. It is crucial that training be provided in the new solutions, and that you make sure that the innovation potential is maintained through changed routines.

Many have found that investing in, for example, new video conferencing equipment does not reduce physical travel to the extent hoped for. This may be because employees are not trained in how to use the equipment and/or no goals are set for the number of flights by which travel is to be reduced.

Consider contractualising training in the new systems as part of the procurement. Is it possible to create a simple user guide for the system?

You must also expect to train the employees in new ways of working. In the video conferencing example, this might mean working in more structured ways with the culture around meetings, ensuring that meeting participants are given the materials ahead of time, and ensuring that there is a clear leadership of the meeting, etc.

5.2 Experience and learning

After having implemented an innovative procurement process, it is important to make sure to learn from the work that has been done. The evaluation can help systematise the experience from the project and highlight any obstacles to innovation.

A number of issues should be included in the evaluation:

- How the needs of the users were attended to
- Economics/profitability (process and result)
- Time usage
- Any obstacles to innovation
- Strengths/weaknesses in the implementation of the project
- Who were important to include in the process?
- Feedback from the market or from expert and research communities