BY THE PUBLIC, FOR THE PUBLIC – TOWARDS ENGAGING ENTREPRENEURS IN DEVELOPING INNOVATIVE TECHNICAL SOLUTIONS

ABOUT THE DOCUMENT (AND ABOUT US):

What follows was written by us but inspired by SME's and creative individuals who had the skills and motivation to deliver top-notch technical solutions to the community yet were unable to do so due to uncertainty surrounding procurement regulations. To address those needs, on the 19th of May 2018, the GovTech Poland team began the work on a new model of public procurement of advanced technologies. After thousands of hours of interacting with hundreds of stakeholders, numerous publications and with the pilot heading towards completion, we are proud to present the result of the months that followed. We have put great effort into creating not just a challenge-based way of selecting the best solutions, but also a model covering the whole procurement process. We wanted to streamline the entire path from identifying a need to successfully implementing the solution, through different methods of engaging stakeholders.
In our approach we allow for the direct purchase of solution without further need to conduct a contract award procedure to select the winner. This is fully compliant with the EU legal framework and the Polish Public Procurement Law provisions. We hope that within this document the reader will find inspiration for their own initiatives or reflections, and together we may make a step towards more modern, agile and inclusive procurement.

WHY DESIGN CONTESTS?

In an increasingly technology-reliant world, the need for the state to ensure that a constant stream of innovations flows into the public sector becomes paramount. Acquiring software however demands an entirely new approach, as ready-to-use solutions to public sector needs are rarely available. Developing new products from scratch entails the contracting authority knowing nearly nothing but how much can the product cost and (in vague terms) what it is supposed to do. This is not enough to create a full specification, which in turn is a prerequisite to conduct a regular contract award procedure.

Alternatively, it turns out to be just enough to organize a two-stage design contest. Participants would come up with ideas and create small solution

samples, MVPs or *Proofs of Concept* (known as "study projects" in official procurement terminology) during the first stage, some of which will be selected for prototyping during the second stage and awarded with (cash and/or in-kind) prizes. In the second stage, study projects will evolve into prototypes and the best solution will be given a full implementation contract without any further proceedings (they will however have the opportunity to enter into negotiations with the contracting authority). Furthermore, the rules of design contests enforce transparency in a much stricter way than most other types of procurement, ensuring participants' confidence in the fairness behind the judging process.

Additionally, design contests allows the contracting authority to vastly broaden the array of participants to include start-ups, small software-houses, research institutes and other actors excelling in tasks requiring low-to-medium amounts of resources. This is why the following document has been created to apply to contests where the reward's value does not exceed the EU threshold. and thus follows the domestic procedure.

DESIGN CONTESTS AND THE GOVTECH POLAND PROGRAMME

GovTech Poland is a cross-ministerial task force, established by Prime Ministerial Decree No. 55 and operating within the Chancellery of the Prime Minister of Poland. Its mission is to develop new methods of obtaining cutting-edge innovative solutions by the State and is thus posed to work closely with all contracting authorities on every stage of the procedure outlined below and advise them, as well as provide organizational and technical support when required.

PREPARING AND CARRYING OUT DESIGN CONTESTS

STAGE 0 – The Problem

Although the design contest does not officially begin until it's formally announced, it is imperative for the organisers to prepare well beforehand, and the first step that needs to be taken is identifying the institution's business need. All that could be satisfied with a technological solution are appropriate. It is also recommended to, before the procedure begins, conduct a market reconnaissance and ensure that there are no readily available solutions capable of addressing the institution's needs and that could be more conveniently obtained by following a different procedure. Should the institutions wish so, they can notify the GovTech Poland Programme of their intent to carry out their purchase not just according to the procedure outlined below, but also as part of a series of design contests coordinated more directly by GovTech Poland. Pending feasibility and

applicability evaluations by the Programme's experts, an individual action plan of further cooperation will then be set up. At that stage, the problem becomes a potential challenge which will eventually be presented to the contestants.

This early period is also when the teams responsible for carrying out the process on the contracting authority's side should be formed. It is important for that team to be operating dynamically and equipped with enough prerogatives never to have to reach out to people from outside the team. It should also have easy and convenient access to:

a) The target solution's business owner – the person with knowledge of not just how the product will be used, but also of its immediate surroundings. The owner knows exactly what will be required of the design contest's effect, and therefore be able to indicate what is actually needed and what redundant.
b) An IT professional, preferably the one responsible for the solution's final implementation environment. It is their role to sanity-check other members' ideas and provide the infrastructure required, inter alia, for testing.
c) A lawyer/public procurement expert. Their task is to ensure the team has the capability to smoothly navigate the legislative surroundings, including the recommendations of this document and the institution's internal regulations.

Crucially, each of the abovementioned individuals should have a deciding voice in any issue pertaining to their area of expertise. Avoiding the situation when management, or other people external to the team need to be consulted before a decision is made is the only way to ensure that the challenge is formulated correctly from both, the legal and technical standpoint.

STAGE 0 – The Challenge

At this point, the challenge is close to being formulated. Although not all details need to be established at that point (after all, the whole point is that the contestants need to have a degree of flexibility), some elements, such as the final value of the design contest, or the evaluation criteria are needed before the design contest starts.

Regardless of the competence and expertise of the contracting authority's IT personnel, the market remains the best way of verifying the challenge's feasibility. In order to avoid accusations of bias, it is recommended to conduct the consultations using a procedure known as "Technical Dialogue"

(henceforth referred to as "Dialogue"). This tool, while intended to be simple and convenient to use has regrettably often been build up to to the brink of unusability by excessive internal regulations. It is therefore important to stress that:

a) The Dialogue is intended as a way to conduct non-binding consultations. Participating in it does not imply participation in the design contest, nor even that such design contest will ever be held.
b) The Dialogue's form has never been specified. Conducting it via Web, phone or a series of meetings is equally acceptable. Dialogues can be drawn out, or conducted with all participants at once. While the Dialogue should be conducted in a manner that ensures the fairness of design contest, and equal treatment of participants, it does not imply that they should all be contacted in the same way, nor given the same amount of time.
c) As long as the Dialogue does not overlap with the design contest, there is no time limit to its duration. It is entirely possible for the Dialogue to be announced once and conducted until the institution believes that further consultations are no longer needed.
d) The contracting authority does not need to set any conditions for participating in the Dialogue. It is also possible to end the Dialogue with selected participants whenever the institution concludes they can no longer contribute to the discussion.
e) As long as it is stated in the Dialogue's announcement, participants can be admitted to the Dialogue even after the application deadline has passed.
f) Applications for participation in the Dialogue can be submitted electronically, via e-mail or by other means. It is recommended not to require written applications, or physical presence. It is recommended to shorten the scope of the application and the time required to complete it to the bare minimum necessary.
g) Each Dialogue's announcement needs to be published on the institution's website. Regardless of the above, it is also recommended to make a list of potentially interested companies and invite them individually by phone or e-mail. The people responsible for the dedicated invitations need not be employed by the Dialogue's organiser, only an authorisation is required.
h) If the intended challenge will require the use of any materials, such as datasets, or dedicated software, it is recommended that samples of these materials be made available to the Dialogue's participants. This applies especially to challenges which involve any element of data analytics, AI, or Machine Learning.

i) It is recommended that the dialogue be conducted in a manner allowing participants located outside of the country to contribute freely and conveniently.
j) The Dialogue need not be a meeting, or a series of meetings. Hackathons for example are a viable form of conducting a Dialogue.
k) The official aim of the Dialogue may be to gather advice pertaining to conducting a feasibility study of the challenge. While announcing the Dialogue, the contracting authority need not have perfect knowledge of the challenge's details, nor even of the questions intended for the Dialogue. Prepared drafts of the design contest's terms, or the contract given out to the winners also aren't required at that point in time.
l) It is recommended that the final business user of the winning solution be present during the Dialogue to answer questions about their requirements. This person should also have a voice in how the questions are formulated and how the Dialogue is conducted.
m) As the Dialogue is a non-binding process, it is recommended to limit the decision-making process required before it's announced to an absolute minimum.

Templates of the Dialogue announcement and rules of procedure are available on the website of the Polish Public Procurement Office at: https://www.uzp.gov.pl/baza-wiedzy/wzorcowe-dokumenty/wzorcowe-dokumenty-dotyczace-dialogu-technicznego – currently only PL version available. It is important to stress their brevity. This is deliberate and indicative of how flexible the Dialogue was intended to be. The PPL (in Article 31a - 31d) also deliberately sets out very few requirements on the part of contracting authority. Thus, it should not take long between the intention to carry out the Dialogue and its actual announcement.

The Dialogue should be concluded when the institution has established that the challenge, in its current shape is solvable in the intended time, budget and with the available resources and/or datasets. The institution should also know the criteria which will be used to evaluate the contestants' work, and be now able to draft up rules of procedure of the design contest, as well as the assumptions of the implementation contract.

It is important, at this stage, to consider potential answers to the following questions, which may well be asked by the contestants:

a) "Is our solution only required to do this [X], or also to do that [Y]"?
b) "Who will be the end-user? What degree of digital/linguistic competence may I assume?"
c) "How many simultaneous users should I be planning for?"

d) “Who should be able to access my solution? Should there be restrictions on who should be able to use my solution? Should remote access be enabled? What about authentication? Do all users have equal status?”
e) “Can I/should I use open-source components in the design process?”
f) “What is the available infrastructure of the contracting authority? Should my solution be compatible with a particular software/technology?”
g) “What should be included in the presentation?”
h) “Could this matter be clarified from the end-user’s perspective?”
i) “Will more modules be added to the solution in the future? What kind of budget can be assumed for that?”
j) “Can cloud solutions of a third-party company be employed in the design process?”
k) “What kind of files will constitute the input/output of my solution? How many are there to be and of what type?”
l) “Can additional members be added to my team? How?”
m) “In the evaluation criteria what do you mean by [x]?”

The above questions are by no means all that could be expected to appear during the design contests, and more challenge-specific ones should be added to the list. Nonetheless, the organisers’ ability to answer them can serve as a good indicator of when the Dialogue should be concluded.

After ensuring that the value of the design contest matches the market reality, the contracting authority has to secure the funding required for carrying out the implementation. This must be done before the design contest is officially announced.

It is also important to consider the details of the financial aspects of the design contest. Due to the specifics of the IT sector, it seems reasonable to grant cash or in-kind prizes to those who perform best during the first stage, and grant full or partial reimbursements to the participants of the second stage to cover the costs of prototyping, while setting a maximum limit of the reimbursement.

The decision on how much should the design contestants be reimbursed should take into account the level of complexity of the work. However, please remember that cash prizes count towards the design contest’s value. Also, awarding a cash prize at the first stage does not necessarily entail the transfer of the relevant intellectual property rights. The contracting authority sets in the design contest rules the provisions referring to transfer of intellectual property rights.

Due to the fact that a design contest is a public promise it is important to include the costs it entails in the budgetary plans of the contracting authority. This does place a certain risk on the part of the contracting authority as its budgetary plan technically may not be accepted as a whole by the legislative branch. However, the contracting authority may include specific provisions in the rules of procedure of the design contest, specifying that should it not be granted sufficient funding in the next fiscal year, the contracting authority may call off the design contest without declaring the winner.

STAGE 1 – „brainstorming"

The first stage of the design contest begins with the official publication of the design contest notice in the appropriate official journal. This however, especially given the preferences of the start-up community, is vastly insufficient to ensure a high participation rate. It is therefore recommended to conduct an individual, wide-scoped promotional campaign, using means such as:

a) The institution's social media: Facebook, Twitter, LinkedIn, Instagram, YouTube etc.
b) The contact networks of governmental institutions which deal with supporting start-ups on a daily basis, as well as those of NGOs and commercial establishments.
c) Specialized nationwide and local media.
d) The institution's participation in events aimed at the start-up sector.

The promotional campaign should start as soon as possible, preferably right after the design contest notice is published. It is also possible and recommended to inform about the intent to organize the design contest well before it begins. In doing so, one restriction applies – the rules of design contest, or the contract template shouldn't be made public before the start. Other things, however, such as the subject-matter, structure, schedule etc., can be revealed before.

Until the publication of the design contest notice, the rules of procedure of design contest should be developed. They regulate both stages of the design contest, although a detailed elaboration (the actual installation/other process allowing the contracting authority to fully use the winning solution) of the design contest work takes place within a separate contract concluded with the author of the selected design contest entry after conducting the procedure. The rules of procedure therefore, constitute a very important

document, the preparation of which is connected with a number of issues that the contracting authority must take into special consideration.
The first issue refers to minimization of formal burdens. The first stage requires two things from the contestants:

a) Submission of request to participate in the design contest together with a statement on the absence of grounds for exclusion, a declaration of compliance with the conditions for participation in the procedure (if the contracting authority specifies such conditions) and a power of attorney to represent the contractor if it acts through a proxy.

b) After evaluating the requests and inviting the contestants to submit their work – presentation of the study project.

It is important to ensure that these processes require the least effort from the Participants. This requires the process to be digitised as much as possible.

At the moment, PPL requires submission of request to participate in the design contest in a paper form with a handwritten signature or with the consent of the contracting authority in an electronic form bearing a qualified electronic signature.

However, the contest work can be submitted electronically without the need to use paid tools or a qualified electronic signature. If the expected file size is not large, the contestant may use the opportunity to send an anonymised report to the e-mail address of the contracting authority, which then the contracting authority would forward to the representatives of the Design contest Jury without revealing the e-mail sender identity and interfering with the study elaboration. If, however, the Contestant is expected to send a study elaboration requiring a large disk space, it should look for a partner who will provide the necessary disk space.

The detailed guidelines on the recommended level of anonymity at each stage of the process will be the subject of a separate document.

The conditions for participation in the design contest procedure are also worth mentioning. The PPL Act allows for the introduction of various requirements (e.g.: size of the team, experience, certification, and subject-specific knowledge).

However, if the contracting authority wants to involve as many participants as possible in the first stage, what seems to be a desirable direction, it may waive to set such requirements. The start-up environment is characterised by the fact that it often does not collect references, and the lack of experience is compensated by efficient organisation, greater talent, "fresh look" and more intensive work ethics.

By setting the previously mentioned requirements, the contracting authority can therefore unnecessarily restrict the access of participants capable of substantively solving the challenge, with little or no value added. The formal issue is no less important- in the IT industry the lack of references does not always mean lack of competence. It will therefore be difficult to create an index of required documents. In addition, waiving those requirements shortens the time for examining the requests, allowing the contracting authority to shorten the duration of the design contest.

Another issue worth mentioning is to ensure proper contact with the contestants. This is especially important when developing innovative solutions, because a smooth flow of information is a prerequisite for the development of a working product. For this purpose, it is recommended that the contracting authority designates experts available to answer questions and provide participants with information and knowledge necessary to solve the challenge.

One must remember that the way the contracting authority communicates with the Design contest participants is part of the rules of procedure of the design contest regulations and pursuant to art. 18a point 1 of the Act Amending the Public Procurement Law Act - communication between the contracting authority and the contractors is carried out in accordance with the choice of the contracting authority via the postal operator, in person, via a messenger courier, fax or using electronic means of communication. In contract award procedures tenders for IT services, it is reasonable for the contracting authority to allow communication among others using electronic means of communication, e.g. e-mail.

As most Participants will most probably prefer electronic communication, it should of course be remembered that the answer given to one participant must be sent to all others in order to ensure their equal treatment of entities. However, this does not exclude the use of electronic channels (Slack, Trello, Asana, social networks), as a way of communication between Participants and the Organizer, making them both viable choices of tools.

Postal and in-person communication is far from sufficient and raises the risk of not only a significant extension of the response process, but also

discouraging participants from contacting the organizer. In addition, in order to maintain internal consistency of the response, it is suggested to use the same channel (in private mode) for internal communication between experts.

To ensure the highest effectiveness of the process, it is recommended to take the following steps:

a) Separate experts from members of the Design contest Jury in order to ensure impartiality and equal treatment of participants.

b) Ensure the participation of external entities in the composition of the Design contest Jury, but also in the group of experts. Due to the positive communication effect, these may be, for example, well-known industry experts, representatives of accelerators, non-governmental organisations or state institutions supporting innovation.

c) Before the first stage of the design contest, train experts in the field of used tools and how to answer most likely questions. It is worth considering creating a database of frequently asked questions (FAQs) before they appear.

Under sub-paragraph c), it is recommended to ensure that the training includes how the questions described in the first part of this document should be answered. It's more probable then that the effect of work of design contest participants will correspond to requirements of the contracting authority. During the first stage, the result of the work is (formally referred to as "study elaboration") the presentation of two elements of the solution:

a) A fragment of the final solution called "Proof of Concept" is a proof of feasibility of the solution. It can be a program running on a small portion of data, an application having only a small part of functionality or another element allowing the contracting authority to become convinced that a given participant is able to implement solutions in the given area, and that the presented concept has the potential to solve the problem resulting in the challenge.

b) Presentation or another document containing the vision of the final solution. It describes which modules are required, what are optional and other key parameters of the target product. As the participants are not familiar with the specifics of infrastructure of a particular contracting authority at this stage, it is recommended that the requirements for the presentation focus more on the functionality provided by a given process within the solution rather than on technical details.

The two stated above elements complement each other. The first ensures that the participant has a good idea and the second one that he is able to implement it. It should also be noted that due to the lack of reimbursement of costs in the first stage, the total working time necessary to create a solution by a team of several people not having advanced infrastructure should not exceed a few days (for example two).
Requests to participate in the design contest along with any appropriate declarations or documents are examined by the contracting authority before the invitation to submit study project elaboration.

It should be clearly communicated by the contracting authority that while the work on the solution can last for the whole period starting from the beginning of the design contest, it can only be submitted after admission to participate was granted, as well as the fact that the deadline for submitting requests to participate in the design contest and the deadline for submitting the works are two different dates.

The last important issue are the criteria set out in the rules of procedure based on which the contracting authority will select study project elaborations that enter the second stage of the design contest. It is worth preparing the criteria based on which the contracting authority will create a a ranking list and invite some of the best teams to the next stage. In accordance with principle of objectivity, the greatest possible involvement in the development of measurable and comparable criteria is recommended. They may arise as a result of consultations in the Technical Dialogue described above.

It is desirable to invite such a number of participants to the second stage that will allow the contracting authority to obtain the best possible design contest work developed on the basis of study project elaborations..
Regardless of prizes, it seems reasonable to show some appreciation to all the participants.

Summing up, the first stage is necessary in order to conduct the widest possible dialogue with domestic and international community of developers, start-ups and other innovators and to choose those partners who give the best guarantee of achieving the assumed objectives of the design contest, i.e. obtaining an effective and possible to implement technological solution. This guarantees that the participants who have the best ideas and the greatest implementation potential will qualify for the second stage.

STAGE 2 - the second stage of the design contest process and submission of the design contest entry

Stage II, unlike Stage I, is not intended to collect ideas, but rather to select the best work i.e. the one that contains the best solution taking into account the needs, constraints and other conditions of the contracting authority. Because it vastly depends on resources of the contracting authority, it is difficult to recommend one particular form of the second stage. However, we propose to consider the following aspects:

a) Part of the knowledge necessary to create a working solution is often not information that can be made public. The contracting authority should therefore have a draft of confidentiality statement to be signed by the participants, when needed.

b) During the second stage, a significant number of "business" questions to contracting authority can easily be predicted, such as "Should the solution supposed to have such functionality?". It is important that the business owner answers such questions without unnecessary delay.

c) It is recommended that the participants are coordinated by people with professional experience in working with start-ups. Such a person should serve as an intermediary between the contracting authority and the contestants.

d) It is suggested to provide a full or partial refund of justified costs to contestants qualified for the second stage of the design contest , specifying at the same time the maximum limit of such costs.

The second stage ends with the selection of the winning contest work and the invitation of the author to negotiate under single-source procurement as well as the possible distribution of additional prizes for the recognised works.

After announcing the results of the 2nd Stage, it is recommended to conduct the award ceremony or the design contest sum-up meeting. The next step is to start the abovementioned procurement process as well as sign the relevant contract. The content of the finally signed contract should reflect the agility of the winner's standard mode of work and will also be the subject of separate "good practices".

CONCLUSION

Although this will end the design contest procedure, it is just the beginning of paving a road that will allow you to navigate more confidently across the

opportunities that the procurement system offers to those who are not afraid of innovative solutions. Our goal, however, was not only to explain how the law works in practice, but also to show how limitless the possibilities are. The state has the potential to be a dream partner of innovative enterprises, combining reliability, flexibility and concern for something more than profit. We hope that this study will be a useful tool when using this potential.
The list of good practices in innovation policy would not be complete, however, without encouraging all readers to think creatively and constructively and to criticise and discuss it widely. They are the source of positive changes that we try to stimulate. We are happy to discuss further areas of the procurement ecosystem in future editions of the “Good Practices" and encourage you to contact us. We believe that the jointly developed process of acquiring advanced technologies will be not only as innovative as the implemented solutions, but will also ensure efficiency, transparency, development and satisfaction for everyone.