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Royal Scientific Society

CALL FOR EXPERT(S)

Mission in support of Jordanian innovation and competitiveness including a study on existing limitations in accessing to new technologies and a tax incentive plan for companies.

Introduction

Historically, Jordanians have not enjoyed full access to new technologies because of regulatory oversight deeming certain technologies security risks of sorts. Notable recent examples of this were temporary heavy regulations of 3D printing and drone technologies that lasted for years and prevented tech-savvy Jordanian enterprise from capitalizing on these newly available technologies to build regionally competitive commercial operations. Eventually, restrictions were either removed/eased, though not before many years in each of these cases. Such limitations, often imposed inconsistently and by non-experts, point to inefficient and harmful regulatory oversight when it comes to new technologies. It is not clear that government regulatory restrictions followed any expert advice or wider engagement of the science and technology community in Jordan, particularly that which presides within the public sector.

As such, the present mission aims to generate economic data that supports the need for regulators to engage with scientific advisors, such as the Higher Council for Science and Technology, in order to ensure rational regulation which avoids needlessly impeding private sector growth and competitiveness, with drone and 3D printing technologies as case examples. In addition, this mission will also consider how a R&D tax incentive plan could contribute to improve national competitiveness by offering tax breaks to Jordanian companies.

Background Information on THE NEXT SOCIETY

THE NEXT SOCIETY is an open community of changemakers, entrepreneurs, investors, corporates, NGOs, public and private innovation, research and economic development hubs from Europe and 7 Mediterranean countries: Algeria, Egypt, Jordan, Lebanon, Morocco, Palestine and Tunisia.

It aims at **mobilising, promoting and reinforcing innovation ecosystems** and economic development in the MENA region.

To reach these goals, THE NEXT SOCIETY supports the emergence of talents and innovative leaders who will drive the next trends and usages by targeting start-ups, clusters and technology transfer offices to accompany their development.

Launched by ANIMA Investment Network and 30 partners, **THE NEXT SOCIETY** has launched **a four-year action plan (2017-2020), co-funded by the European Union** up to 90% for a global amount of EUR 7.8 million, which impacts 4 levels of the innovation ecosystems:

1. Improve **policy frameworks**: THE NEXT SOCIETY establishes a public-private dialogue and benchmarks Mediterranean innovation ecosystems in order to design and implement country strategic roadmaps and improve innovation support strategies.
2. Foster **start-up** successes: THE NEXT SOCIETY offers tailor-made support to Mediterranean start-ups to help them go international and raise funds thanks to tailor-made services: innovators academies, mentoring, soft landing, bootcamps, international business development missions and power dinners with investors. Download the [Start-up Booster Track](#) brochure.
3. Promote and internationalise **clusters**. THE NEXT SOCIETY develops peer-learning services for business and industrial clusters as well as foreign partnerships and guides them towards a Cluster Excellence management approach. Download the [Cluster Booster Track](#) brochure.
4. Accelerating **technology transfer** towards the enterprise. THE NEXT SOCIETY involves technology transfer offices, universities, researchers and creators to develop solutions to the challenges faced by their countries, through calls for projects and workshops with potential users of these solutions (large international firms, industry leaders, investors, entrepreneurs, civil society). Download the [TTO Booster Track](#) brochure.

For more information, please download THE NEXT SOCIETY presentation brochure [here](#).



Technical assistance mission details

Context

The level of technological advancement of a society is a determinant of its economic growth and the quality of life, with impacts on competitiveness, job creation, and wide societal prosperity. Any unwarranted delay in access to new technologies can result in lost opportunities thus slowing economic growth as well as decline in a country's regional competitive position. Furthermore, access to and development of emerging technologies have become important economic planning tools. For example, several countries have already included 3D printing into their national strategies to gain advantage in the broader 4th industrial revolution of which 3D printing is a key part.

Jordan's government delayed the entry of 3D printing and drone technologies for years, with the stated reason being security concerns. The impact of allowing the access to these technologies on Jordan's competitiveness position regionally would have benefited the communities, education, entrepreneurship, and traditional enterprises by fostering the creation of new products, the emergence of new companies, and developing skills transferable into a wide variety of technical and professional jobs. For example, early movers in Lebanon captured large regional exclusive distribution agreements with 3D printing technology providers, and many is not most Jordanian 3D printers must pass through Lebanese middlemen. Lebanon is currently considered a regional leader in 3D printing given its early adoption and highly-skilled labour force leading to the introduction of this technology to the market once available. For example, Lebanon has become home to the biggest 3D printer in the MENA region (Big Voxel) which was developed in 2015 to manufacture furniture and machine components. With a comparatively educated workforce, Jordan could have similarly benefitted from the advantages that an early start in the technology provided.

Therefore, there is a need to activate a rational scientific advisory role to the government as the scientific advisor on issues in which modern technologies may be viewed as threatening by regulators, in order to prevent Jordan from falling behind the region due to over-regulation. In support of this proposition, an estimate the value of the lost opportunity to Jordan from 3D printing and drone technologies will be estimated, and paired with a narrative of how such technologies eventually became available to Jordan. This estimate will be used to advocate better regulatory planning and, hopefully, better access to risk-managed technologies towards better regional competitiveness for our technology startups and established industries.

Finally, the role of innovation in delivering the growth needed for social and economic development is well documented. As such, many leading and developing economies worldwide have adopted a strategy of incentivising corporate to invest in research and development through various mechanisms including tax incentives. Though innovation regularly features in national strategies as an important growth driver, successive tax laws and public spending plans have apparently fallen short of expectation. It might be the case that Jordan is in need of an R&D tax incentive plan that strikes a balance between required fiscal prudence and vital growth needs.

Format and objectives of the mission

This call is open for Jordanian expert(s) (individual or institutional) knowledgeable in the fields of entrepreneurship and economics. The selected expert(s) will conduct the mission with the objective of estimating the value of lost opportunity to Jordan on different aspects of national growth, such as: Economic value, job creation, education and skills, sustainability, technology advancement, and national defence/security.

To do so, the expert(s) will conduct numerous expert and stakeholder interviews, researching documented cases related to 3D printing and drone technologies. Furthermore, the expert(s) will present a study on global practice for R&D tax incentives, explore the potential costs and impact one or more arrangements that might be suitable for the local context, and engage policy makers and the public sector in presenting and discussing findings in a workshop setting.

The mission will have to include the following components:

- Desk research on available information related to previous and current instances of blocked technologies in Jordan including but not limited to drones, 3D printing, communication technologies, etc., while comparing the availability of such technologies with other countries within the region and beyond. \
- Attempt to understand the security apparent security justification of limiting access to 3D printing and drone technologies, along with other potential considerations informing government policy.
- Interviews with key stakeholders in an attempt to construct an apparent narrative from initial ban to easing regulations and thew current state of play.
- Constructing a defensible economic model that estimate the total impact of technology bans for 3D printing and drone technologies.
- Present a report on current global practice in R&D tax incentives.
- Estimate the potential costs and impact of a plausible R&D tax incentive model for Jordan.
- Engage policy makers and relevant key players in the public sector and the international institutions' community (including Ministry of Finance, Ministry of Planning, World Bank, civil society organizations, economists, and startups among others) in a discussion of the findings of the study in a workshop setting.

Collaborative framework

The mission is expected to start in July 2021 and last for a 6-week timeframe. For its whole duration, the expert(s) will work in close collaboration with Jordanian technology stakeholders, in particular with the iPARK team at the Royal Scientific Society. Ultimately, the expert(s) will present their findings as a full report submitted at the end of the 6 week period.

Deliverables of the mission

- A detailed work plan and deliverable scopes and structures (week 1)

- A narrative and status quo report for the 3D printing and drone technologies sector from early movements by Jordanian businesses to regulatory blockages to regulatory easing to the current state of the sector and sustained regulatory oversight (week 4)
- A quantitative economic analysis of the impact of delay in technology access, along with qualitative impact factors (week 6)

Budget allocated for the mission & payment conditions

The budget allocated for the entire mission must include all mission costs, including travel costs (travel ticket and subsistence costs in Jordan if necessary).

The Royal Scientific Society will proceed to the payment of the estimated costs the latest 1 month after completion of the action and the validation of the outputs and the final report.

THE NEXT SOCIETY management team will proceed to the payment of the estimated costs the latest 2 months after completion of the action and the validation of its deliverables.

The total budget allocated for the entire mission is anticipated to be approximately 35.000,00€.

Selection Criteria & Process

Profile of the expert(s)

The expert(s) should fulfil the following criteria:

- Natural person (with team) or enterprise
- At least 5 years of experience in economic analysis and entrepreneurship, as well as macro-economic analysis.
- Proven knowledge and expertise in research-based start-ups and technology transfer processes and practices acquired as entrepreneur and/or investor and/or consultant.
- Previous experience in Jordan and knowledge of the local regulatory and security structures countries will be a strong asset.
- Proficiency in English and Arabic are required.

Application & selection process

Applications should include:

- A detailed resume highlighting the expert(s) experience in the fields relevant to the expertise mission
- A technical offer including a description of the methodology used, main milestones and implementation steps as well as an estimate of the time spent on each task;
- A financial offer (days and costs in man days).



Deadline : Applications should be sent to THE NEXT SOCIETY coordination team on the following email addresses: welcome@thenextsociety.co and m.aljafari@ipark.jo before 28/06/2021.